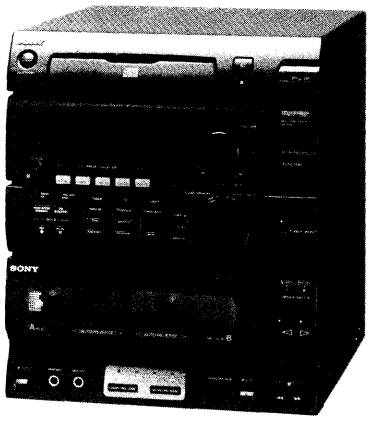
HCD-H901AV

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model
Chinese Model



HCD-H901AV is the CD player and stereo deck receiver in FH-G90AV/ MHC-901AV.

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CD SECTION	Model Name Using Similar Mechanism	HCD-H701
	CD Mechanism Type	CDM28-5BD19
	Base Unit Type	BU-5BD19
TAPE DECK SECTION	Model Name Using Similar Mechanism	HCD-H701
	Tape Transport Mechanism Type	TCM-220WR2

SPECIFICATIONS

CD player section

System: Compact disc digital audio system
Laser: Semiconductor laser
Wavelength: 780 – 790 nm
Frequency response: 2 Hz – 20 kHz

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range: 87.5 – 108.0 MHz (50 kHz step)
Aerial: FM lead aerial
Aerial terminals: 75 ohm unbalanced
Intermediate frequency: 10.7 MHz

AM tuner section

Tuning range
AEP, UK model: MW 531 – 1,602 kHz
LW 153 – 279 kHz
G model: AM 531 – 1,602 kHz
IT model: AM 522 – 1,611 kHz
AUS model: MW 531 – 1,602 kHz
SW 5.95 – 17.9 MHz
MX model: AM 531 – 1,710 kHz (9 kHz step)
530 – 1,710 kHz (10 kHz step)
E, EA, MY, SP, CH, HK model: MW 531 – 1,602 kHz (9 kHz step)
530 – 1,710 kHz (10 kHz step)
SW 5.95 – 17.9 kHz
Aerial: AM loop aerial
External aerial terminals
Intermediate frequency: 450 kHz

Tape player section

Recording system: 4-track 2-channel stereo
Frequency response: (DOLBY NR OFF)
40 – 13,000 Hz (±3 dB), using Sony TYPE I cassette
40 – 14,000 Hz (±3 dB), using Sony TYPE II cassette
Wow and flutter: 0.1% WRMS ±0.3% (DIN)

Amplifier section

AEP, UK, G, IT model:
DIN power output
FRONT SPEAKER: 30 W + 30 W (6 ohms, at 1 kHz)
CENTER SPEAKER: 20 W (8 ohms, at 1 kHz)
REAR SPEAKER: 5 W + 5 W (8 ohms, at 1 kHz)
E, EA, MX, MY, SP, CH, HK, AUS model:
Peak music power output: 1200 W
Continuous RMS power output
FRONT SPEAKER:
AEP, UK, G, IT model: 35 W + 35 W (6 ohms, at 1 kHz, 5% THD)
E, EA, MX, MY, SP, CH, HK, AUS model: 40 W + 40 W (6 ohms, at 1 kHz, 5% THD)

— Continue to next page —

MINI Hi-Fi COMPONENT SYSTEM

SONY®

CENTER SPEAKER:
AEP, UK, G, IT model:
30 W (8 ohms, at 1 kHz, 5% THD)
E, EA, MX, MY, SP, CH, HK, AUS model:
10 W + 10 W (6 ohms, at 1 kHz, 5% THD)
REAR SPEAKER:
10 W + 10 W (8 ohms, at 1 kHz, 5% THD)
Inputs
VIDEO IN: Sensitivity 250 mV, impedance 47 kilohms
Outputs
PHONES (stereo phone jack):
accept headphones of 8 ohms or more.
Outputs
PHONES (stereo phone jack):
accept headphones of 8 ohms or more.
FRONT SPEAKER:
accept impedance of 6 to 16 ohms.
CENTER SPEAKER:
AEP, UK, G, IT model:
accept impedance of 8 to 16 ohms.
E, EA, MX, MY, SP, CH, HK, AUS model:
accept impedance of 6 to 16 ohms.
REAR SPEAKER:
AEP, UK, G, IT model:
accept impedance of 8 to 16 ohms.
E, EA, MX, MY, SP, CH, HK, AUS model:
accept impedance of 6 to 16 ohms.

General

Power requirement
AEP model: 220–230 V AC, 50/60 Hz
UK, G, IT model:
220–230 V AC, 50 Hz
AUS, MY model:
220–240 V AC, 50/60 Hz
MX model: 120 V AC, 50/60 Hz
E, EA, SP, CH, HK model:
110–120 V/220–240 V AC, 50/60 Hz
Adjusting with the voltage selector
Power consumption
AEP, UK, G, IT model:
150 W
E, EA, MX, MY, SP, CH, HK, AUS model:
170 W
Dimensions Approx. 280 × 325 × 335 mm (w/h/d) incl. projecting parts and controls
Mass Approx. 8.9 kg

Design and specifications are subject to change without notice.

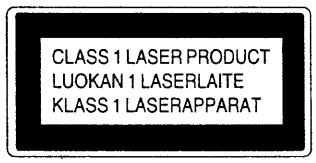
Abbreviation

MX:	Mexican	HK:	Hong Kong
G:	German	MY:	Malaysia
IT:	Italian	AUS:	Australian
EA:	Saudi Arabia	CH:	Chinese
SP:	Singapore		

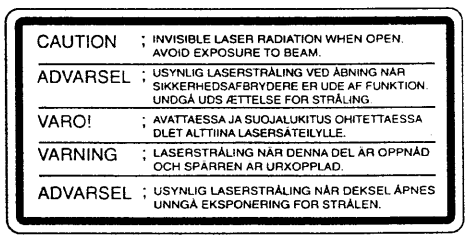
NOTE

AE1: Tuner section FM IF AMP become transistor.
AE2: Tuner section FM IF AMP become IC.
E2 : Tuner section SW BAND do not exist.
E3 : Tuner section SW BAND exist.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.


CAUTION ; INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL ; USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARO! ; AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSÄTEILYLLE.
VARNING ; LASERSTRÅLING NÄR DENNA DEL ÄR OPPNAD OCH SPARREN ÄR URXOPPLAD.
ADVARSEL ; USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

This caution label is located inside the unit.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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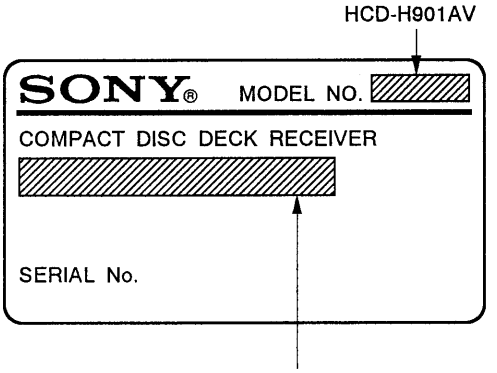
MODEL IDENTIFICATION

– Model Number Portion –



AEP model: AC 220 – 230 V ~50/60 Hz 150 W
UK model: AC 220 – 230 V ~50 Hz
G, IT model: AC 220 – 230 V ~50 Hz 150 W
E, EA, SP, CH, HK model:
AC110 – 120/220 – 240 V ~50/60 Hz 170 W
MX model: AC120 V ~50/60 Hz 170 W
AUS, MY model: AC220 – 240 V ~50/60 Hz 170 W

- Abbreviation

MX:	Mexican	HK:	Hong Kong
G:	German	MY:	Malaysia
IT:	Italian	AUS:	Australian
EA:	Saudi Arabia	CH:	Chinese
SP:	Singapore		

SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

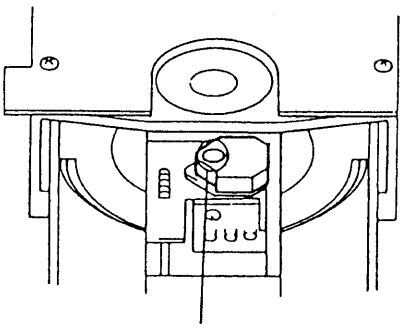
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Make POWER switch on with no disc inserted and disc table closed.
2. Confirm that the following operation is performed while observing the objective lems.



Confirm that laser beam is spread.

❷ UP and downmotion of the objective lens. (3 times)

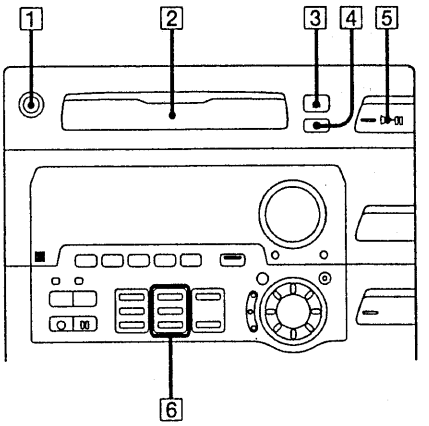
SECTION 1
GENERAL

Index to Parts and Controls

Refer to the pages indicated in parentheses for how to use the controls.
Controls with an asterisk have indicators on themselves.

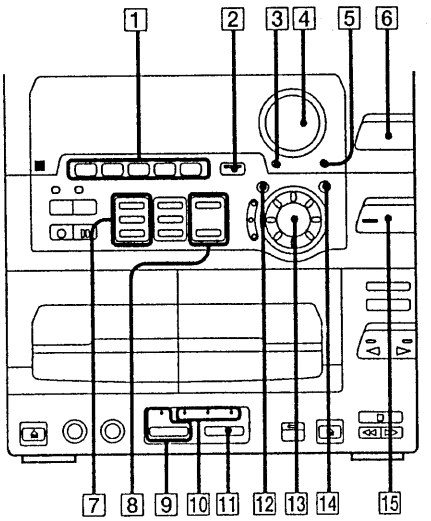
Front Panel

CD player



1 SYSTEM POWER ON/STAND BY switch (7)
2 CD tray (7)
3 ⏏ OPEN / CLOSE button (7)
4 ■ (stop) button (7)
5 ▷II (play and pause) button* (7)
6 CD operating buttons
CONTINUE button (8)
SHUFFLE button (8)
PROGRAM button (8)

Tuner/Amplifier

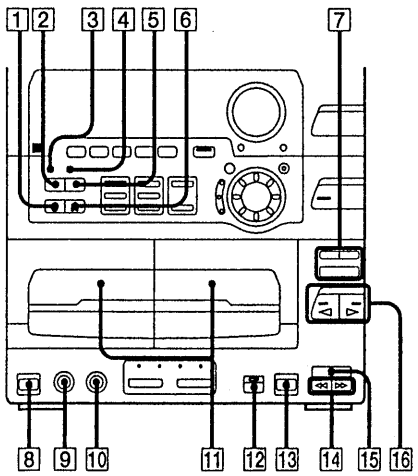


1 Preset equalizer setting buttons* (17)
2 DBFB button (17)
3 CLOCK SET button (6)

This section is extracted from instruction manual.

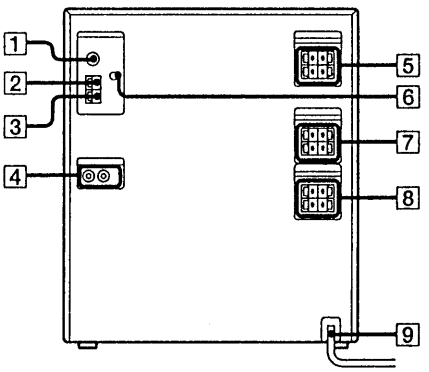
[4] VOLUME control (17, 19, 21)
[5] DISPLAY button (6, 7)
[6] FUNCTION button (8, 14, 16, 18, 22)
[7] Timer operating buttons
TIMER SET button (21)
DAILY button (21)
TIMER REC button (22)
[8] Tuner operating buttons
TUNING MODE button (10, 22)
MONO button (10)
[9] DOLBY PRO LOGIC button and ON/OFF lamp (19)
[10] Surround effect lamp (20)
[11] SURROUND MENU button (20)
[12] TUNER MEMORY button (11)
[13] Jog dial (6, 7, 10, 13, 21)
[14] ENTER/NEXT button* (6, 11, 21)
[15] TUNER/BAND button* (10, 15, 22)

Tape player



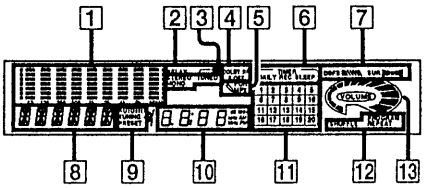
[1] REC button* (13)
[2] HIGH SPEED DUBBING button (15)
[3] DOLBY NR button (12)
[4] DIRECTION MODE button (12)
[5] CD SYNCHRO button (13)
[6] ⏸ PAUSE button* (12)
[7] DECK A/DECK B button and A/B lamps (12)
[8] ⏏ EJECT button (for deck A) (12)
[9] PHONES jack (17)
(You can connect the headphones.)
[10] MIX MIC jack (22)
[11] Tape compartments (12)
[12] KARAOKE PON button (23)
[13] ⏏ EJECT button (for deck B) (12)
[14] ▶▶ (fast rightward) (12)
◀◀ (fast leftward) buttons (12)
[15] ■ (stop play) button (12)
[16] ▷ (front side play)* (12)
◁ (reverse side play) buttons* (12)

Rear panel



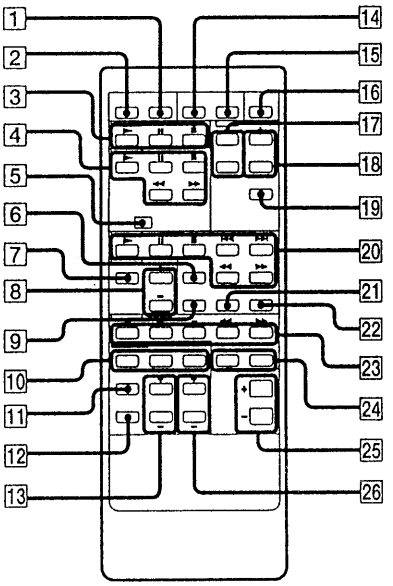
[1] FM 75Ω COAXIAL terminal (4)
[2] ⏚ earth terminal (4)
[3] AM terminal (4)
[4] VIDEO IN jacks (18)
[5] FRONT SPEAKER connectors (4)
[6] ⏚ ground terminal (4)
[7] CENTER SPEAKER connectors (4)
[8] REAR SPEAKER connectors (4)
[9] Mains lead (5)

Display window



[1] Spectrum analyzer (17)
[2] Tape direction indications (12)
[3] Tuner indications (10)
[4] DOLBY NR indication (12)
[5] Karaoke indication (23)
[6] TIMER/DAILY/REC/ SLEEP indication (21, 22)
[7] DBFB/SUR indications (17)
[8] Function indication (8, 14, 16, 18, 22)
[9] AUTO/TUNING/PRESET/STEP indications (10, 11, 22)
[10] Frequency/time indication (6, 10)
[11] Music calendar (7)
[12] CD play mode indications (8, 9)
[13] VOLUME indication (17)

Remote (RM-U33AV)



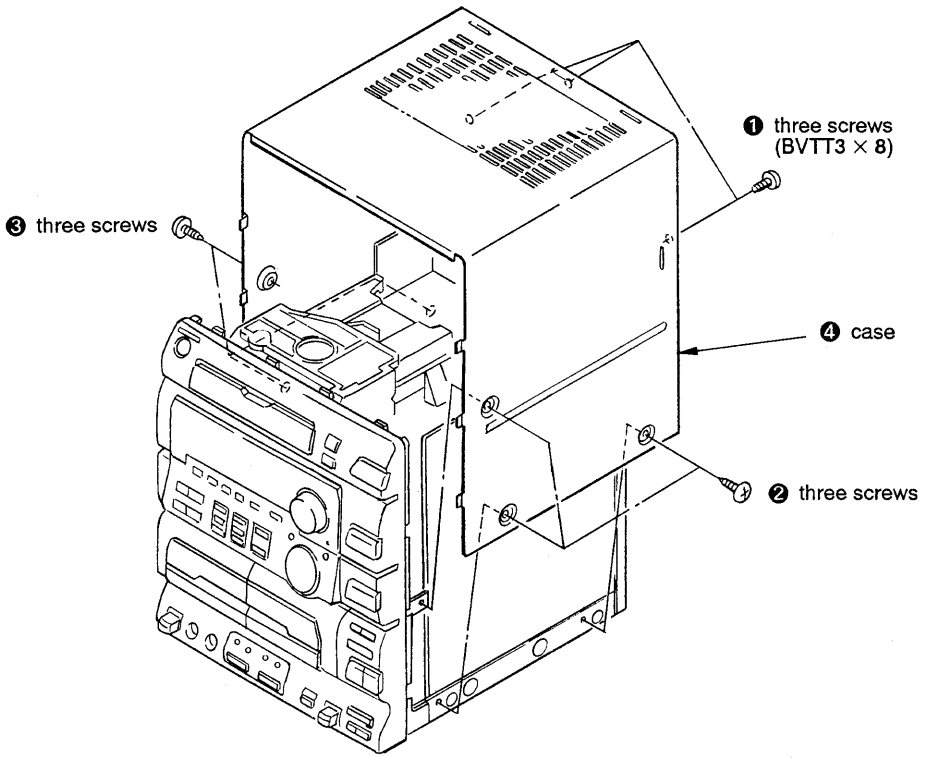
[1] SLEEP button (21)
[2] FUNCTION button (8, 14, 16, 18, 22)
[3] MD operating buttons (you cannot use this button with this model)
▶ (play)
⏸ (pause)
■ (stop)
[4] VCR operating buttons*1
▶ (play)
⏸ (pause)
■ (stop)
◀◀/▶▶ (fast leftward/fast rightward)
[5] VCR 1/2/3 selector (18)*1
[6] REPEAT button (9)
[7] BAND button (10, 15, 22)
[8] PRESET(+/–) buttons (11)
[9] EDIT button (13)
[10] Surround effect buttons (20)
THEATER
HALL
LIVE
[11] PRO LOGIC button (19)
[12] TEST TONE button (19)
[13] CENTER (+/–) buttons (19)
[14] VCR POWER button*1
[15] TV POWER button*2
[16] SYSTEM POWER button (7)
[17] CH (TV channel) (+/–) buttons*2
[18] VOL (TV volume) (+/–) buttons*2
[19] TV/VCR button*2
[20] CD operating buttons (7)
▶ (play)
⏸ (pause)
■ (stop)
⏮/⏭ (AMS)
◀◀/▶▶ (fast leftward/fast rightward)
[21] CHECK button (8, 13)
[22] CLEAR button (8)
[23] TAPE operating buttons (12)
◀/▶ (reverse side play/front side play)
■ (stop)
◀◀/▶▶ (fast leftward/fast rightward)
[24] DECK A/B buttons (12)
[25] VOLUME (+/–) buttons (17, 19, 21)
[26] REAR (+/–) buttons (19)

*1 For use with Sony VCRs
*2 For use with Sony TVs

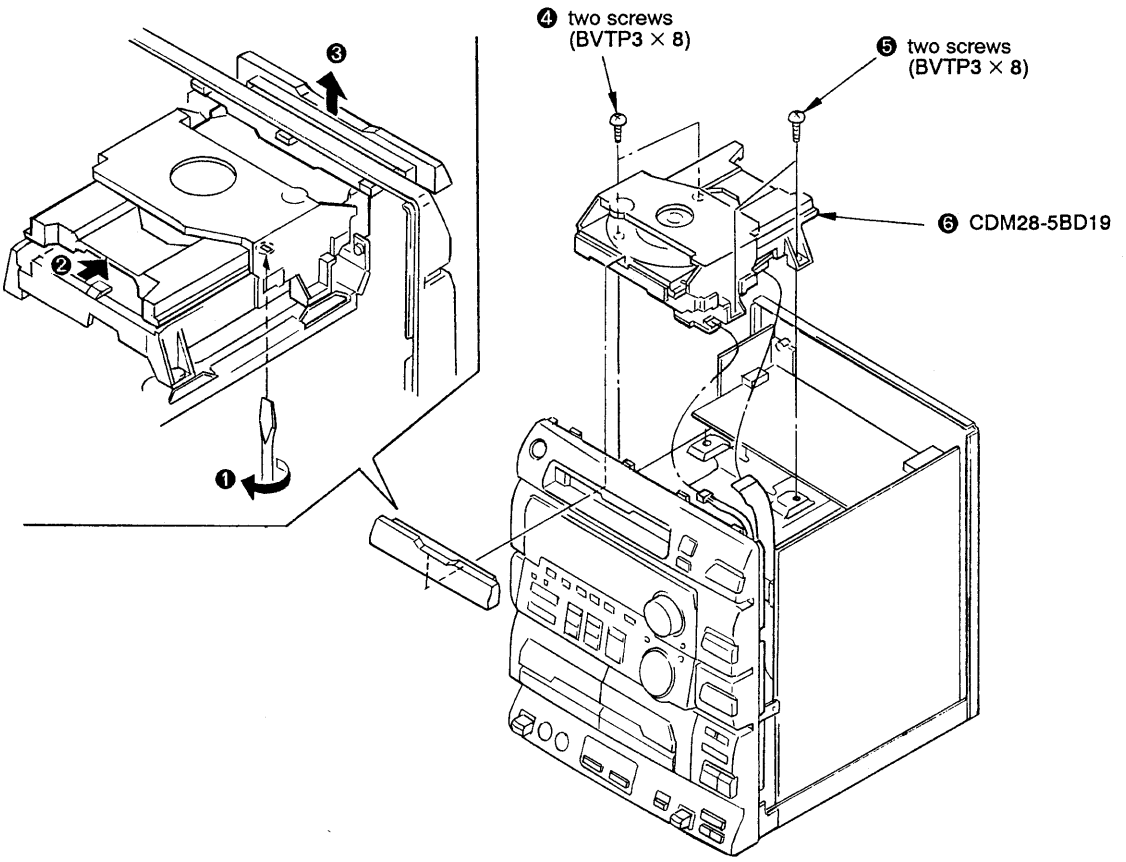
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

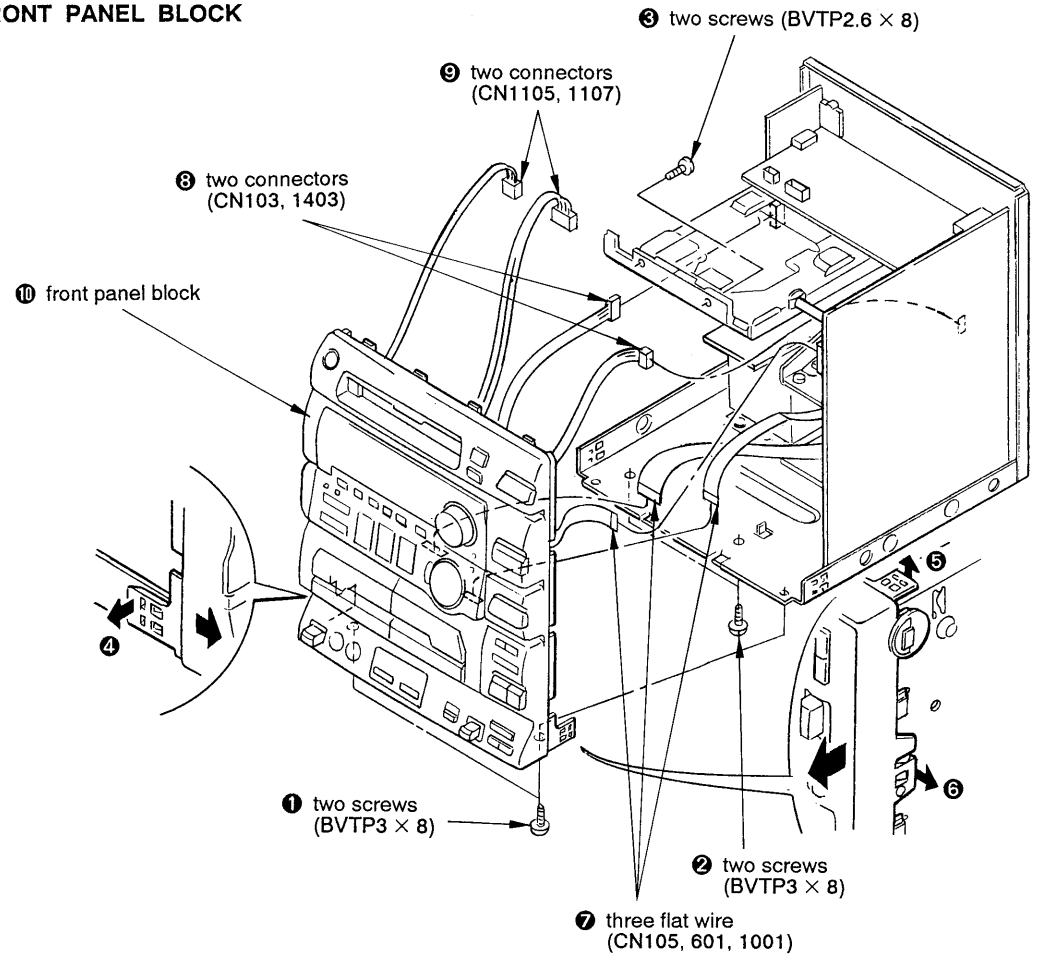
CASE



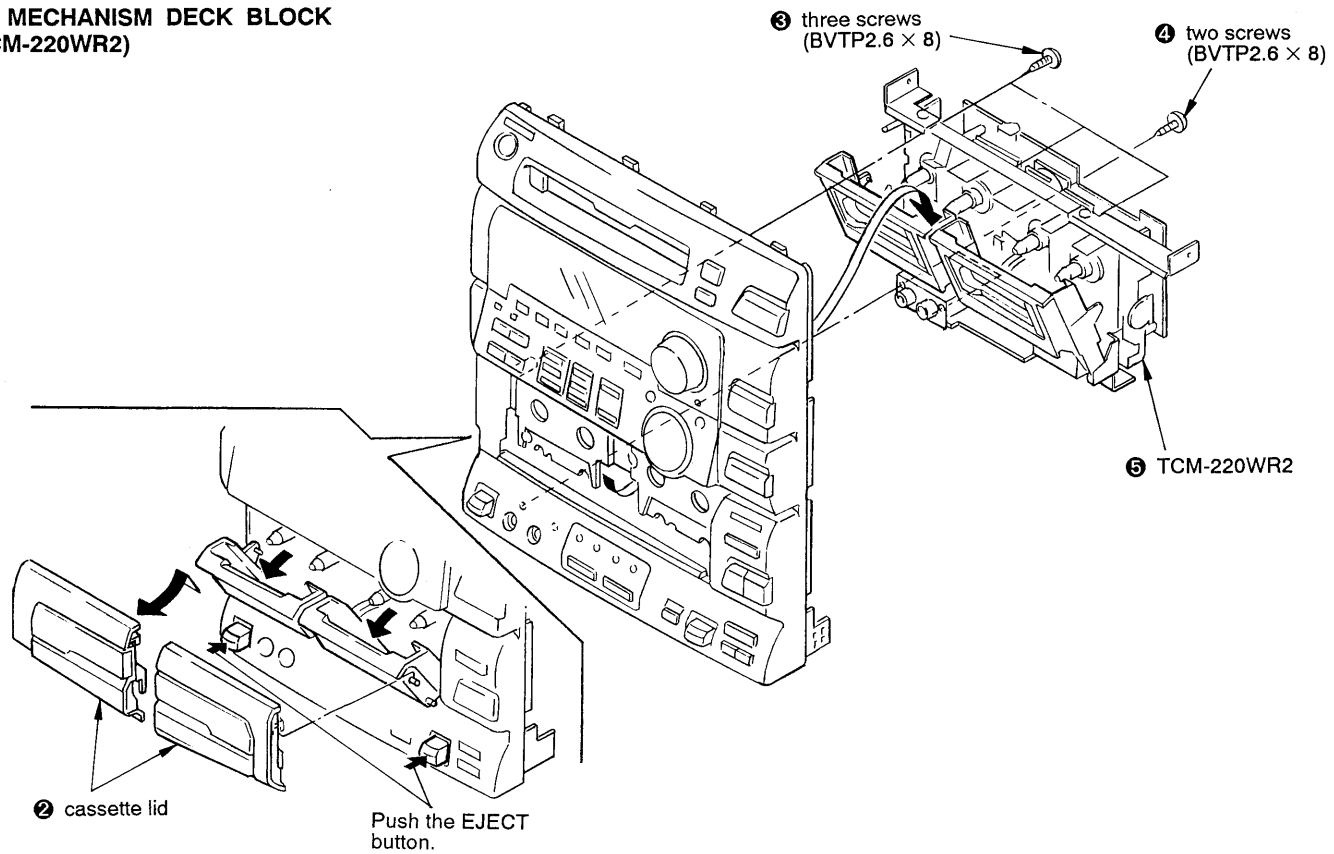
CD MECHANISM DECK
(CDM28-5BD19)



FRONT PANEL BLOCK


❸ two screws (BVTP2.6 × 8)
❾ two connectors (CN1105, 1107)
❽ two connectors (CN103, 1403)
❿ front panel block
❹
❺
❻
❶ two screws (BVTP3 × 8)
❷ two screws (BVTP3 × 8)
❼ three flat wire (CN105, 601, 1001)

TC MECHANISM DECK BLOCK (TCM-220WR2)



SECTION 3
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab :
   record/playback head — pinch roller
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	36 to 61g•cm (0.50 – 0.84 oz•inch)
Forward Back Tension	CQ-102C	2 to 6g•cm (0.026 – 0.082 oz•inch)
Reverse	CQ-102RC	36 to 61g•cm (0.50 – 0.84 oz•inch)
Reverse Back Tension	CQ-102RC	2 to 6g•cm (0.026 – 0.082 oz•inch)
FF, REW	CQ-201B	61 to 143g•cm (0.85 – 1.98 oz•inch)

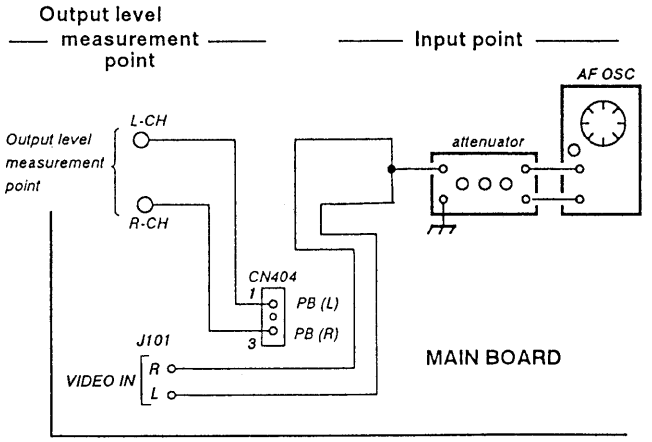
Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 1kg (35.2 oz)
Reverse	CQ-403R	more than 1kg (35.2 oz)

SECTION 4
ELECTRICAL ADJUSTMENTS

DECK SECTION

1. The adjustment should be performed in the publication. (Be sure to make playback adjustment at first.)
2. The adjustment and measurement should be performed for both L-CH and R-CH.
   - Switch position
     DOLBY NR switch : OFF
     FUNCTION button : CD
3. Deck section electrical adjustments are made in test mode by pressing TUNER/BAND, DISPLAY, and POPS at the same time.
4. Input point and output level measurement point.



- **Test Tape**

Tape	Contents	Use
P-4-A100	10kHz, – 10dB	Head Azimuth Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

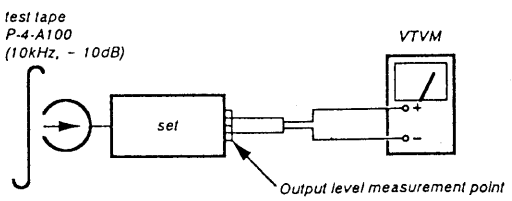
0 dB=0.775V

Record/Playback Head Azimuth Adjustment

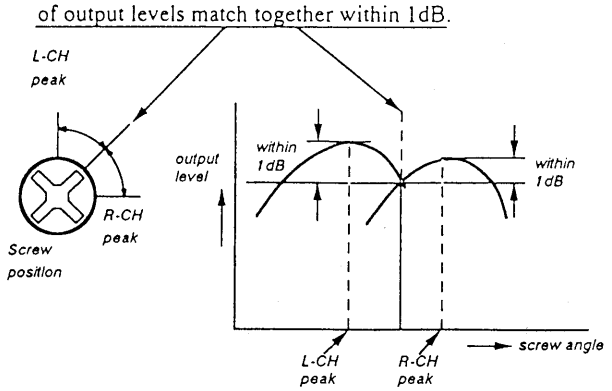
DECK A DECD B

Procedure :

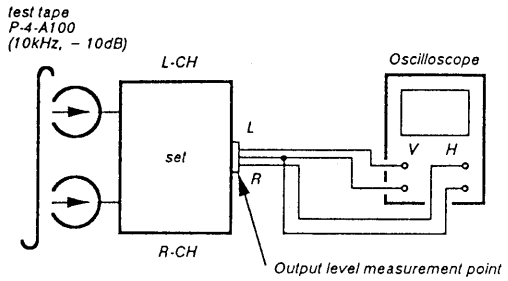
1. Forward Playback mode
   Reverse Playback mode

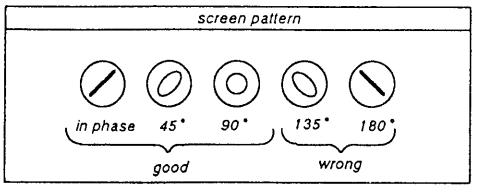


2. Turn the adjustment screw for the maximum output levels.If these levels do not match,turn the adjustment screw until both of output levels match together within 1dB.



3. Playback Mode

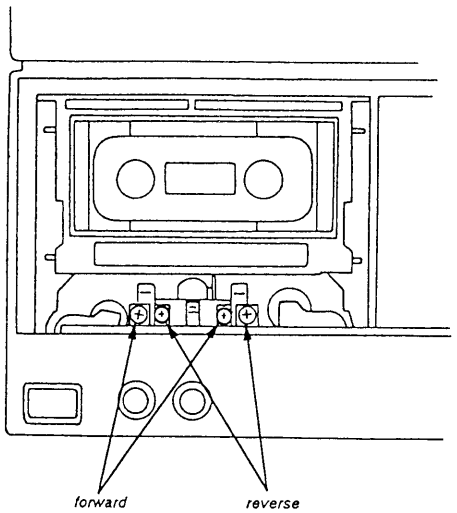




4. Change the review playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location :

– record/playback head (Deck A and B)

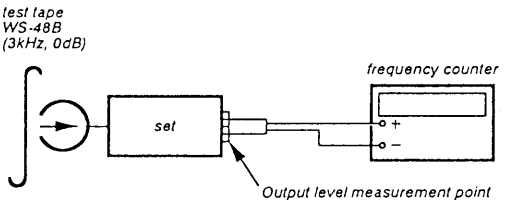


Tape Speed Adjustment DECK A DECK B

Procedure :

- Perform high speed adjustment before normal speed adjustment.

Mode : Playback



Speed	Deck	Adjustment	Frequency counter
*High	A	RV652	5,970 to 6,030Hz
	B	RV652	
Normal	A	RV651	2,985 to 3,015Hz
	B	RV651	

* Continue to press HIGH SPEED DUBBING switch (S3019) in playback mode : High speed playback.

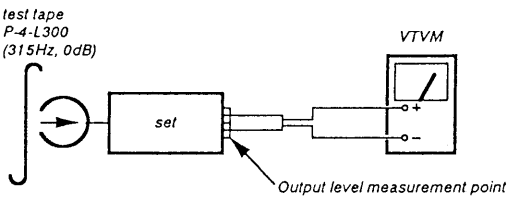
Frequency difference between the begining and the end of the tape should be within ± 3%.
Frequency difference between deck A and deck B the biginning of the tape should be within 1.5%.

Adjustment Location : AUDIO board.

Playback Level Adjustment DECK A DECK B

Procedure :

Mode : Playback



Deck A is RV311(L-CH) and RV411(R-CH), deck B is RV301 (L-CH) and RV401 (R-CH) so that adjustment within adjustment level as follows.

Adjustment Level :

LINE OUT level : – 7.9 ± 0.5dB (0.29 to 0.33V)
Level Difference between Channels : within 0.5dB

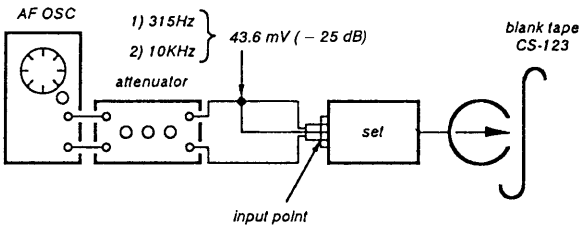
Confirm the DOLBY OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location : AUDIO board.

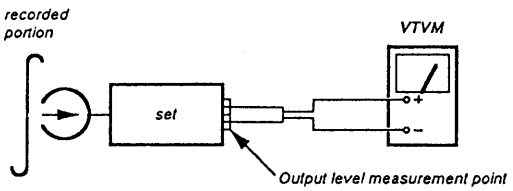
Record Bias Adjustment DECK B

Procedure :

1. Record mode



2. Playback mode



3. Confirm playback the signal recorded in step 1 become adjustment level as follows.
4. If these levels do not adjustment level, adjustment the RV341 (L-CH) and RV441 (R-CH) to repeat step 1 and 4.

Adjustment level : Playback output of 315Hz to playback output of 10kHz : – 0.5dB to 0.5dB.

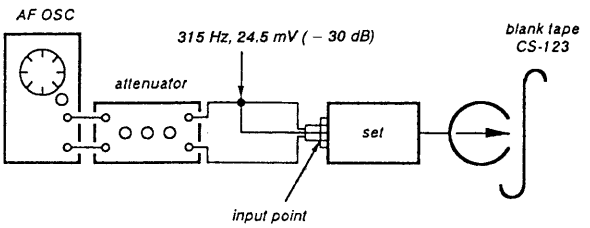
Adjustment Location : AUDIO board.

Record Level Adjustment DECK B

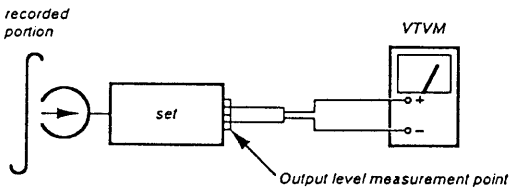
FUNCTION button : CD

Procedure :

1. Record mode



2. Playback mode



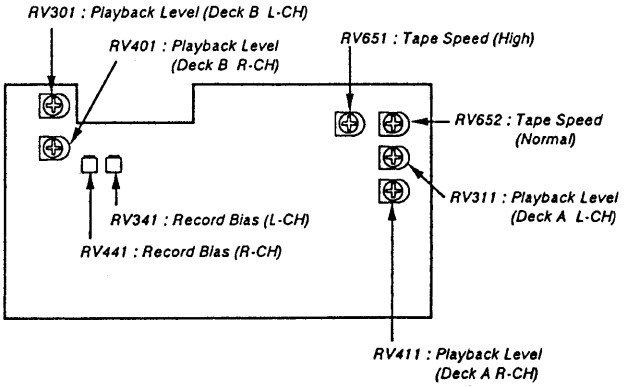
3. Confirm playback the signal recorded in step become adjustment level as follows.
4. If these levels do not adjustment level, adjustment the RV401(L-CH) and RV451 (R-CH) to repeat step 1 and 4.

Adjustment Level :

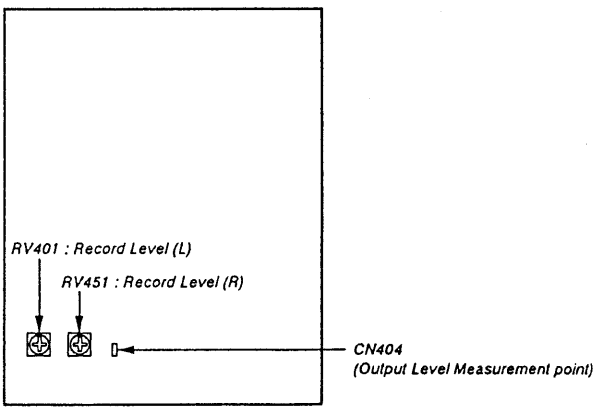
DOLBY OUT level : – 25dB ± 0.5dB (41.1 to 46.1mV)

Adjustment Location : MAIN board

【AUDIO BOARD】 – Component side –


RV301 : Playback Level (Deck B L-CH)
RV401 : Playback Level (Deck B R-CH)
RV651 : Tape Speed (High)
RV652 : Tape Speed (Normal)
RV311 : Playback Level (Deck A L-CH)
RV341 : Record Bias (L-CH)
RV441 : Record Bias (R-CH)
RV411 : Playback Level (Deck A R-CH)

【MAIN BOARD】 – Component side –



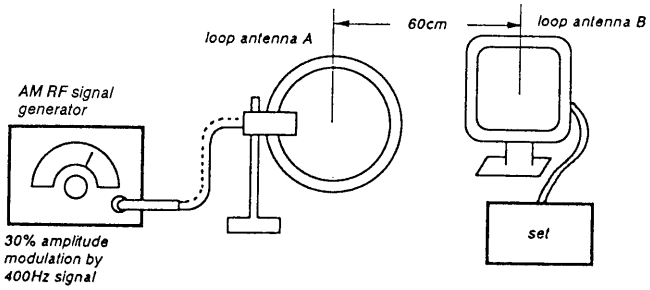
TUNER SECTION

Note. 1 : The adjustment should be performed in the publication. (AM → FM → SW)

Note. 2 : As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

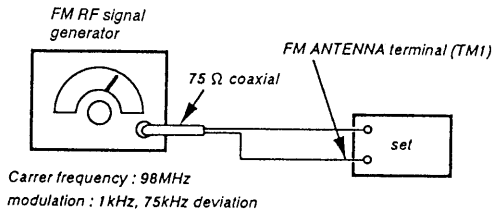
AM Section Adjustment

Setting :



FM Section Adjustment

Setting :



AM Tuned Indication Lighting Level Adjustment

Band : MW

Procedure :

1. Set loop antenna A so that the loop antenna B input level becomes 55dB μ/m.
2. Tune the set to 999kHz (at 9kHz step) or 1,050kHz (at 10kHz step).
3. Adjust RV41 so that the TUNED light up.
4. Confirm that the TUNED light off with AM RF SG output level set at 0dB μ .
5. Confirm the FM tuned indication lighting level and adjust if necessary.

Adjustment Location : Main board

FM Tuned Indication Lighting Level Adjustment

Band : FM

Procedure :

1. Supply a 27dB μ 98MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust RV42 so that the TUNED light up.
4. Confirm that the TUNED light off with FM RF signal generator output level set at 16dB μ .

Adjustment Location : Main board

SW CONTROL Voltage Adjustment

Band : SW

(E3, Saudi Arabia, Hong Kong, Malaysia, Singapore, Chinese model)

Procedure :

1. Connect the VOM to JW376 (OSC).
2. Tune the set to 5.95MHz.
3. Adjust T2 for 1.0 to 1.1V reading on the VOM.
4. Tune the set to 17.90MHz.
5. Adjust CV2 for 8.4 to 8.6V reading on the VOM.

SW Tracking Adjustment

Band : SW

Procedure :

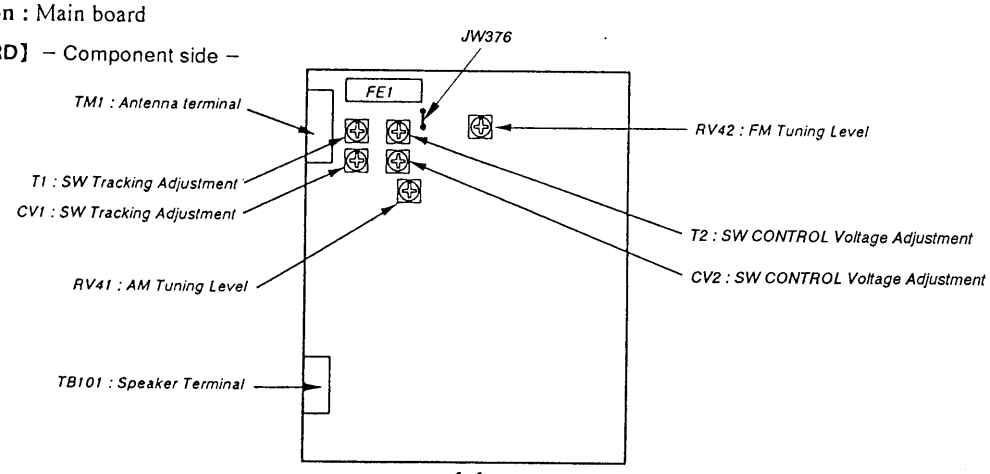
1. Connect the VOM to speaker terminal. (TB101)
2. Adjust for a maximum reading on VOM.

Signal generator and set frequency	Adjustment part
7.0 MHZ	T1
17.0 MHZ	CV1

Adjustment Location : Main board

Adjustment Location : Main board

[MAIN BOARD] – Component side –


JW376
FE1
TM1 : Antenna terminal
T1 : SW Tracking Adjustment
CV1 : SW Tracking Adjustment
RV41 : AM Tuning Level
TB101 : Speaker Terminal
RV42 : FM Tuning Level
T2 : SW CONTROL Voltage Adjustment
CV2 : SW CONTROL Voltage Adjustment

CD SECTION

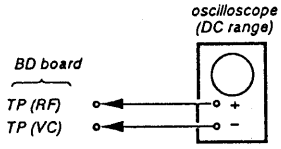
Not :

1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10M Ω impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

Focus Bias Adjustment

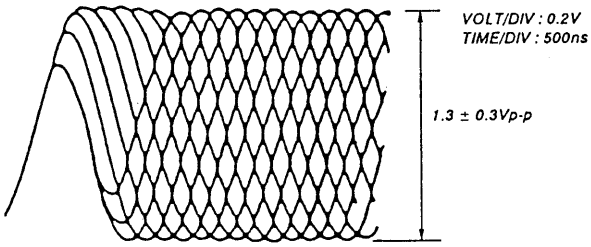
This adjustment is to be done when the optical block is replaced.

Adjustment procedure :



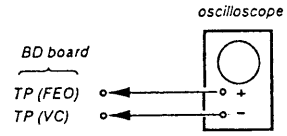
1. Connect oscilloscope to test point TP (VC) and TP (RF) on main board.
2. Turned power switch ON. (Stop mode)
3. Put disc (YEDS-18) in and press the ▶ button.
4. Press the DISPLAY/ENTER button. (Tracking servo ON)
5. Adjust RV101 so that the oscilloscope waveform is as shown in the figure below (eye pattern).
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.
6. Release test mode after adjustment is completed.

RF signal reference waveform (eye pattern)



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

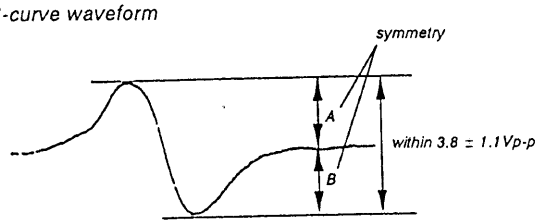
S-Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO) and BD board.
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3.8 ± 1.1Vp-p.

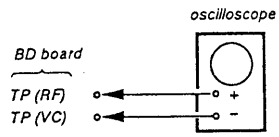
S-curve waveform



6. After check, remove the lead wire connected in step 2.

Note : ● Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.
● Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check



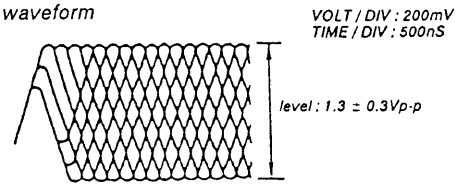
Procedure :

1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

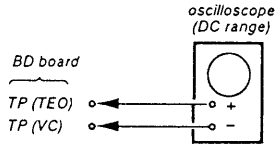
Note :

Clear RF signal waveform means that the shape " ◇ " can be clearly distinguished at the center of the waveform.

RF signal waveform



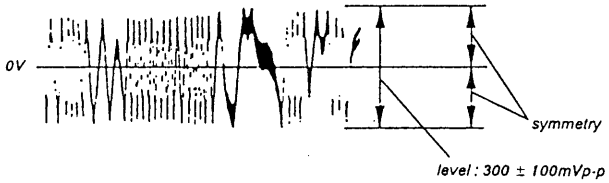
E-F Balance Check



Procedure :

1. Ground main board IC101 pin ㊿ with the lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the osilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

Traverse waveform



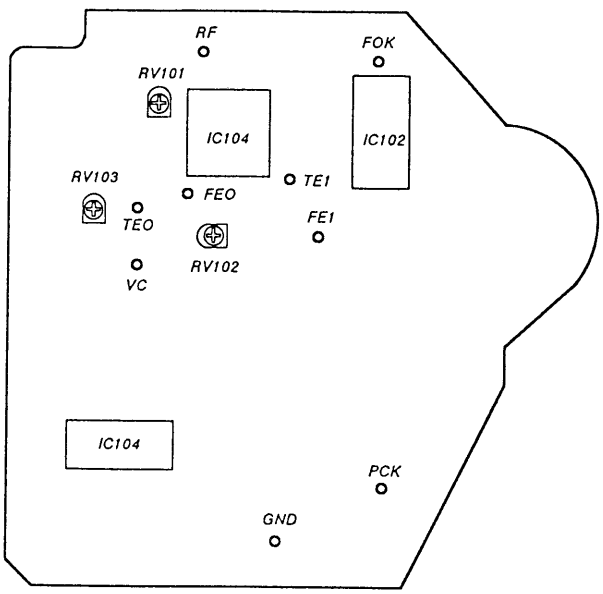
6. Remove the lead wire connected in step 1.

Focus/Tracking Gain

This gain has a margin, so even if it is slightly off. There is no problem.
Therefore, do not perform, this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

Adjustment Location :

[BD BOARD] – Component side –



SECTION 5
DIAGRAMS

5-1. IC PIN FUNCTION DESCRIPTION

IC101 TMP87CP64F-6269 (MAIN Board)

Pin No.	Pin Name	I/O	Function
1	VSS	—	GND
2	X OUT	O	System clock (8 MHz)
3	X IN	I	
4	$\overline{\text{AC. CUT}}$	I	Reset signal input
5	X OUT	O	Timer clock (32.768 kHz)
6	X IN	I	
7	GND	—	GND
8	$\overline{\text{BACK UP}}$	I	Backup mode input
9	COUNT SW	—	Not used (GND)
10	INIT SW	—	Not used (GND)
11	DISC SENS	—	Not used (GND)
12	MID SENS	—	Not used (GND)
13	CD XRST	O	CD reset output ("L": RESET)
14	POWER	O	Power on output ("L": ON)
15	MUTE	O	Muting output ("L": MUTE)
16	MPX	O	MPX CONTROL output
17	KEYCON LATCH	O	Latch output to key conrol (M65840FP)
18	VOL LATCH	O	Latch output to volume controller
19	K. PON A	O	Key control switch output
20	K. PON B	O	KARAOKE PON switch output
21	FUNC A	O	Function selector
22	FUNC B	O	
23	FUNC C	O	Not used (Open)
24	GEQ. LATCH	O	Latch output to volume controller (M62423P)
25	RDS. INT	—	Not used (Open)
26	SCOR (DSP)	I	Sub-code sync (SO+SI) detection input from DSP (CXD2507AQ)
27	SENS	I	SENS input from DSP (CXD2507AQ)
28	CD POWER	O	CD power on output ("H": ON)
29	SC. ACT	O	Surround micro computer (IC1106) on/off output "L": ON
30	D BFB	O	DBFB selector output ("H": DBFB LOW and "L": DBFB HIGH)
31	MUTE	O	TUNER MUTE output
32	CE	O	Chip enable output to TUNER PLL IC (LC72130)
33	STEREO	I	FM stereo identification ("L": Tuning)
34	TUNED	I	FM/AM tuning identification ("L": Tuning)
35	SQ-RDS-CLK	O	Sub-code Q data reading clock output to DSP (CXD2507AQ)
36	SQ-RDS-DI	I	Sub-code Q data input from DSP (CXD2507AQ)
37	RDS-RESET	—	Not used (Open)
38	CLK	O	System clock output
39	D. IN	I	Serial data input from TUNER
40	D. OUT	O	Serial data (common) output
41	TABLE SENS	—	Not used (Open)
42	REQ GM	I	Data TX request input to system controller
43	REQ MG	O	Data TX request output to system controller
44	CLK MG	O	Communication clock output to system controller
45	D. GM	I	Serial data input from system controller
46	D. MG	O	Serial data output to system controller
47	RDY	I/O	READY signal input/output from/to system controller ("L": Ready)
48	VAREF	—	Power supply (+5 V)
49	VASS	—	GND
50	VSS	—	GND

Function selector

FUNCTION	FUNC A	FUNC B
ST	L	L
CD	L	H
TC	H	L
VIDEO	H	H

Pin No.	Pin Nam	I/O	Function
51	VDD	—	Power supply (+5 V)
52	URGENT. SIG	I	Not used (+5 V)
53	URGENT. STBY	I	Not used (Open)
54	BUG Y/$\overline{N}$	—	Not used (Connected to GND)
55	ADJUSTOR	—	Not used ("H" status)
56	ADJUST2	—	Not used ("H" status)
57	MAGIC SPEED	—	Not used ("H" status)
58	SPEC	I	Specification identification input
59	DIST	I	Destination identification input
60	SPEED	—	Not used ("H" status)
61	BREAK	—	Not used ("H" status)
62	B-PLAY	I	Deck B PB switch input ("H": PLAY)
63	B-SHUT	I	Deck B reel table signal input
64	B-HALF	I	Input from REC prevention detecting hooks A and B on deck B
65	A-SHUT	I	Deck A reel table signal input
66	A-PLAY	I	Deck A PB switch input ("H": PLAY)
67	A-HALF	I	Deck A half switch input
68	CAPM H/L	O	Capstan motor speed selection ("H": Normal and "L": High speed)
69	CAPM ON/OFF	O	Capstan motor ON/OFF ("L": ON)
70	TRIG H/L	O	Trigger motor control output
71	B TRG	O	
72	A TRG	O	
73	RELAY	O	Control output to REC/PB selector switch (IC602) ("H": REC)
74	A/B	O	Dolby IC PB input deck A/B selector output ("L": A and "H": B)
75	NORM/HIGH	O	Normal/High speed EQ selector output ("H": High speed)
76	BIAS ON/OFF	O	Bias oscillator ON/OFF output ("H": ON)
77	RM ON/OFF	O	REC muting output ("L": MUTE)
78	REC/PB	O	Dolby IC REC/PB selector output ("H": REC)
79	NR	O	Dolby On/OFF output ("H": ON)
80	LM	O	Line muting output ("L": MUTE)
81	PASS	O	Bass amplifier switch output to Dolby IC (IC401)
82	CDG. MUTE	—	Not used (Open)
83	UP MOTOR	—	Not used (Open)
84	DOWN MOTOR	—	Not used (Open)
85	TABLE R	—	Not used (Open)
86	TABLE L	—	Not used (Open)
87	LOAD OUT	O	Loading motor (M903) load-out output
88	LOAD IN	O	Loading motor (M903) load-in output
89	DF-LATCH	O	Latch output to digital filter (PCM1701U)
90	XLT	O	Serial data latch output to DSP (CXD2507AQ)
91	FOCUS SW	O	High frequency gain suppression output to focusing servo controller (CXA1782EQ)
92	HIGH DUBB	—	Not used ("H" status)
93	TEST1	—	Not used ("H" status)
94	OUT SW	I	CD tray OUT detector input ("L": OUT)
95	IN SW	I	CD tray IN detector input ("L": IN)
96	UP SW	—	Not used (GND)
97	PANEL SW	—	Not used (GND)
98	CLOSE SW	—	Not used (GND)
99	OPEN SW	—	Not used (GND)
100	VDD	—	Power supply (+5 V)

IC501 CXP82612-009Q (PANEL Board)

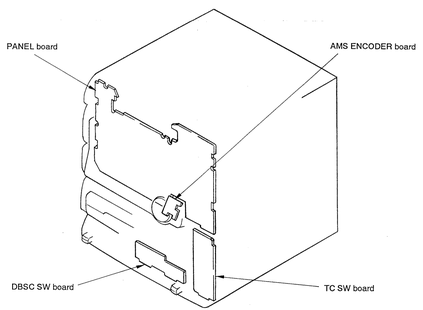
Pin No.	Pin Nam	I/O	Function
1	ENCIA	I	Volume encoder input
2	SIRCS	I	Infrared remote commander signal input
3	REQ. MG	I	Data TX request input from master controller
4	REQ. GM	O	Data TX request output to master controller
5	LED1	O	LED driver output
6	LED2	—	Not used (Open)
7	LED3	—	Not used (Open)
8	LED4	—	Not used (Open)
9	LED5	O	PLAY and PAUSE LED output
10	RDY	I/O	READY signal input/output from/to master controller ("L": Ready)
11	SCK. IN	I	Clock input for communication to master controller
12	SD. IN	I	Serial data input from master controller
13	SD. OUT	O	Serial data output to master controller
14	LED6	O	REC and PAUSE LED output
15	LED7	O	ROCK LED output
16	LED8	O	POPS and JAZZ LED output
17	LED9	O	CLASSIC and DANCE (SALSA) LED output
18	LED10	O	DBFB and TUNER LED output
19	LED11	O	CD and TIMER LED output
20	LED12	O	ENTER/NEXT and TUNER/BAND LED output
21	LED13	O	A and B LED output
22	KEY1	I	Key input (A/D conversion)
23	KEY2	I	
24	KEY3	I	
25	KEY4	I	
26	BPF1	I	Spectrum analyzer signal input: BPF1 150 Hz; BPF2 460 Hz; BPF3 1.5 kHz; BPF4 6.6 kHz
27	BPF2	I	
28	BPF3	I	
29	BPF4	I	
30	$\overline{\text{RST}}$	I	Reset signal input
31	X IN	I	System clock (4 MHz)
32	X OUT	O	
33	VSS	—	GND
34	AN1	O	Driving FL display panel
35	AN2	O	
36	AN3	O	
37	AN4	O	
38	AN5	O	
39	AN6	O	
40	AN7	O	

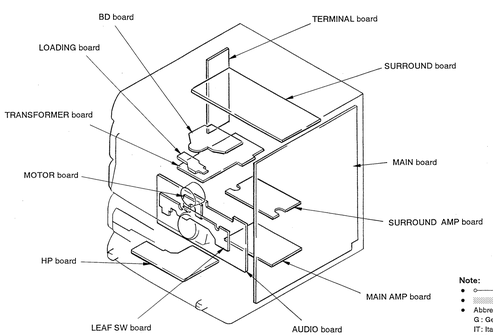
Pin No.	Pin Name	I/O	Function
41	AN8	O	Driving FL display panel
42	AN9	O	
43	AN10	O	
44	AN11	O	
45	AN12	O	
46	AN13	O	
47	AN14	O	
48	AN15	O	
49	AN16	O	
50	AN17	O	
51	AN18	O	
52	AN19	O	
53	AN20	O	
54	AN21	O	
55	AN22	O	
56	AN23	O	
57	AN24	O	
58	AN25	O	
59	GR1	O	
60	GR2	O	
61	GR3	O	
62	GR4	O	
63	GR5	O	
64	GR6	O	
65	GR7	O	
66	GR8	O	
67	GR9	O	
68	GR10	O	
69	GR11	O	
70	GR12	O	
71	VFDP	—	− 25 V driving power for FL display panel
72	VDD	—	Power supply (+5 V)
73	POWER KEY	I	System power key input
74	EZ KEY	—	Not used (Open)
75	VDD	—	Power supply (+5 V)
76	LED14	O	FWD play and RVS play LED output
77	LED15	O	Karaoke-pon LED input
78	ENC 2B	I	AMS encoder input
79	ENC 2A	I	
80	ENC 1B	I	Volume encoder input

IC1106 TMP87C846N-4231 (SURROUND Board)

Pin No.	Pin Name	I/O	Function
1	A	I	Function selection input. Delay mode "H": Variable "L": Fixed
2	B	I	Function selection input. Mute mode "H": Mute & Trim "L": Mute
3	C	I	District selection input
4	RELAY S	O	Relay control output
5	—	I	Not used (GND)
6	—	I	Not used (GND)
7	KEY1	I	Key input
8	KEY0	I	Key input
9	—	I	Not used (GND)
10	—	I	Not used (GND)
11	—	I	Not used (open)
12	—	I	Not used (open)
13	P NORMAL	O	"PRO LOGIC" LED signal output
14	P THEATER	O	"THEATER" LED signal output
15	P HALL	O	"HALL" LED signal output
16	P LIVE	O	"LIVE" LED signal output
17	TEST	I	Not used (GND)
18	$\overline{\text{RESET}}$	I	Reset signal input
19	XIN	I	Clock input (8 MHz)
20	XOUT	O	Clock output (8 MHz)
21	VSS	—	GND
22	VAREF	—	Analog system reference voltage input
23	PRO CLK	O	Clock output for data transmission
24	PRO DATA	O	Surround data output
25	PRO LATCH	O	Latch signal output
26	—	O	Not used (open)
27	—	O	Not used (open)
28	—	O	Not used (open)
29	—	O	Not used (open)
30	P FMUTE	O	Not used (open)
31	—	O	Not used (open)
32	—	O	Not used (open)
33	—	O	Not used (open)
34	$\overline{\text{EFFECT2}}$	O	PRO LOGIC ON/OFF signal output. "L": ON "H": OFF
35	$\overline{\text{MUTE}}$	O	MUTE signal output. "L": ON "H": OFF
36	$\overline{\text{SCACT}}$	I	Power ON/OFF signal input. "L": ON "H": OFF
37	$\overline{\text{EFFECT1}}$	O	Not used (open)
38	SIRCS	I	SIRCS signal input
39	—	I	Not used (+5 V)
40	—	I	Not used (GND)
41	—	I	Not used (GND)
42	VDD	—	Power supply +5 V

• Circuit Boards Location



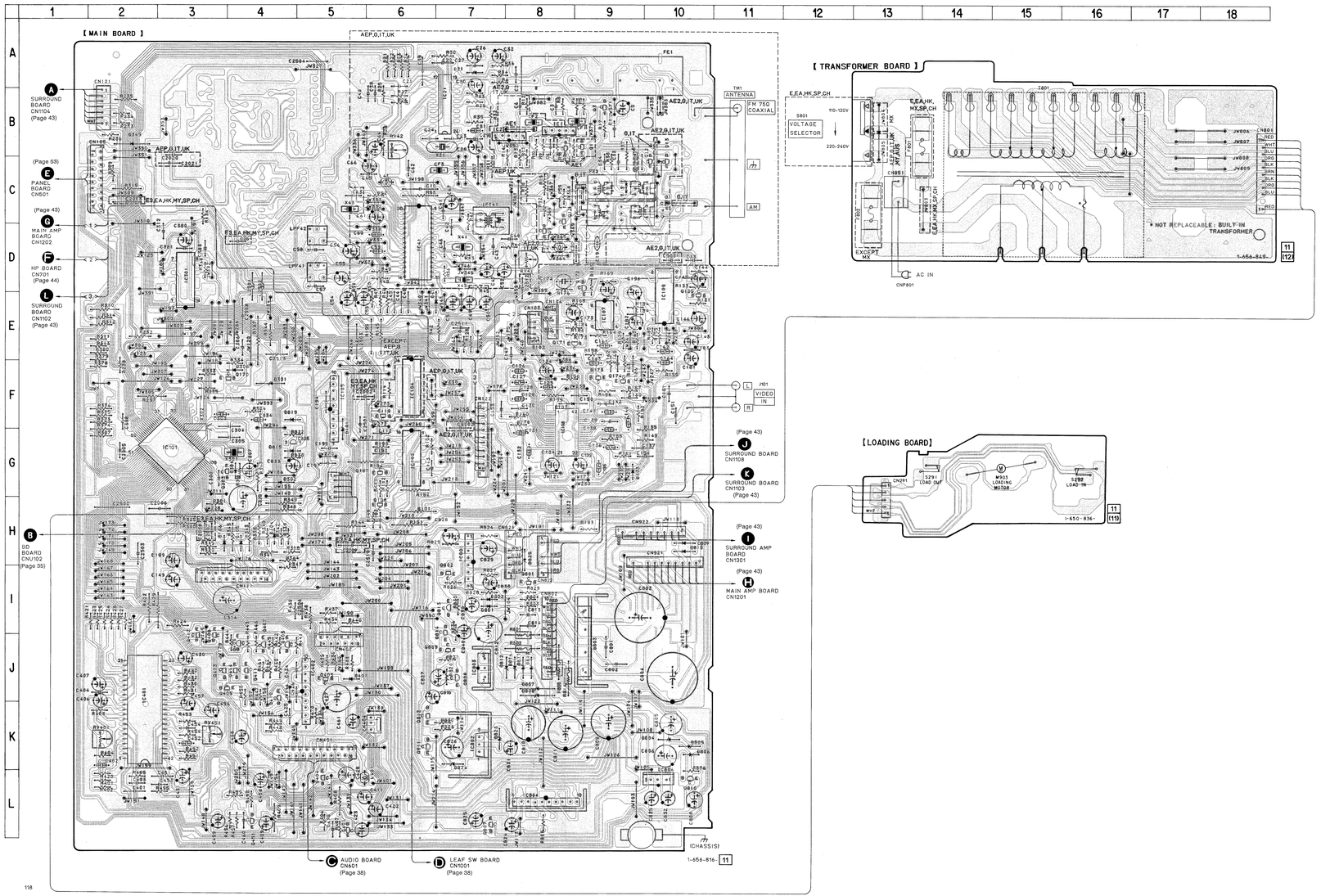


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D21	A-7	Q1	B-9
D41	E-6	Q2	B-8
D101	G-5	Q3	B-9
D102	G-8	Q9	D-8
D103	G-9	Q11	C-8
D104	H-4	Q12	C-10
D105	H-4	Q13	C-10
D106	H-3	Q14	C-10
D107	F-8	Q105	E-10
D301	F-4	Q107	G-6
D302	G-4	Q108	H-6
D304	G-4	Q110	F-6
D306	F-4	Q170	F-4
D349	B-2	Q171	E-8
D401	J-5	Q172	D-9
D801	I-7	Q173	F-9
D802	I-7	Q174	F-9
D803	J-9	Q303	G-3
D804	K-10	Q401	L-5
D805	K-10	Q403	J-5
D806	K-10	Q404	L-5
D807	J-8	Q405	J-4
D808	J-8	Q406	J-4
D809	H-10	Q407	J-4
D810	H-10	Q408	J-3
D811	J-8	Q409	J-3
D812	J-8	Q410	J-4
D813	J-8	Q411	J-4
D814	J-8	Q412	J-3
D815	G-4	Q413	J-3
D819	F-4	Q414	J-4
D823	K-7	Q451	L-4
D824	K-7	Q801	I-8
D825	H-8	Q802	I-7
		Q807	L-7
IC1	B-8	Q808	J-7
IC2	B-7	Q809	J-7
IC21	B-7	Q810	L-10
IC41	D-8	Q811	K-6
IC101	G-3	Q812	K-6
IC102	G-6	Q813	I-7
IC104	F-6	Q814	I-7
IC105	F-5		
IC107	E-9		
IC108	F-8		
IC109	E-10		
IC301	D-3		
IC401	J-2		
IC402	J-5		
IC801	H-7		
IC802	K-7		
IC803	J-7		
IC804	L-8		
IC805	G-4		
IC806	L-10		

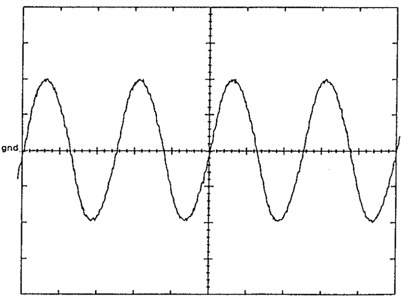
Note:
- ⊙——— : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.
- Abbreviation
  G : German
  IT : Italian
  AUS : Australian
  CH : Chinese
  EA : Saudi Arabia
  HK : Hong Kong
  MX : Mexican
  MY : Malaysia
  SP : Singapore

5-2. MAIN SECTION PRINTED WIRING BOARDS

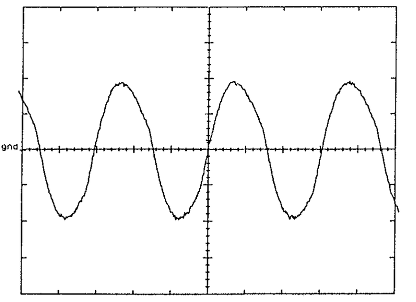

【MAIN BOARD】
AEP,G,IT,UK
E3,EA,HK,MY,SP,CH
EXCEPT AEP,G,IT,UK
A SURROUND BOARD CN1104 (Page 43)
(Page 53) E PANEL BOARD CN601
(Page 43) G MAIN AMP BOARD CN1202
F HP BOARD CN701 (Page 44)
L SURROUND BOARD CN1102 (Page 43)
B SD BOARD CN1/102 (Page 35)
TM1 ANTENNA
FM 75Ω COAXIAL
AM
J701 VIDEO IN
(Page 43) J SURROUND BOARD CN1108
K SURROUND BOARD CN1103 (Page 43)
(Page 43) I SURROUND AMP BOARD CN1301
(Page 43) H MAIN AMP BOARD CN1201
C AUDIO BOARD CN601 (Page 38)
D LEAF SW BOARD CN1001 (Page 38)
(CHASSIS)
1-656-816- 11
118

• Waveforms

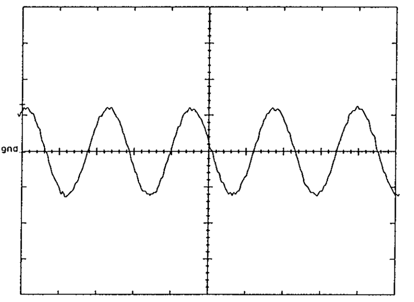
⑮ IC101 ② 4Vp-p 8MHz



⑯ IC101 ⑤ 3.9Vp-p 32.8kHz



⑰ IC21 ① 2.5Vp-p 4.5MHz



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- (fusible resistor symbol) : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- B+ : B + Line.
- B− : B − Line.
- ▭ : adjustment for repair.

- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : PLAY (TC)
  < > : REC
- Voltages are taken with a VOM (10 MΩ/V). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

- Signal path.
  ⇨ : FM
  ➡ : AM
  : PB (DECK A)
  : REC (DECK B)
  : PB (DECK B)
  : CD
  ▷ : MIC
- Abbreviation
  G : German
  IT : Italian
  AUS : Australian
  CH : Chinese
  EA : Saudi Arabia
  HK : Hong Kong
  MX : Mexican
  MY : Malaysia
  SP : Singapore

5-3. MAIN SECTION SCHEMATIC DIAGRAM

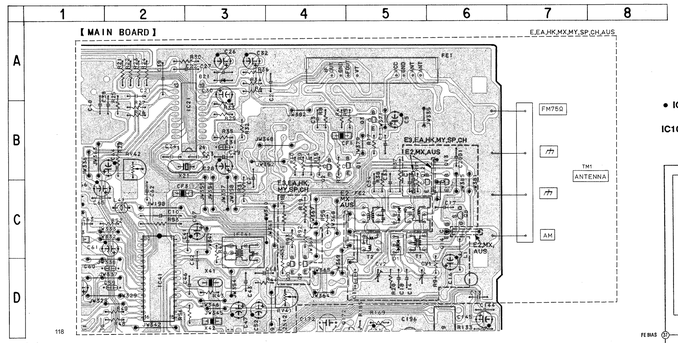
• See page 56 for IC Block Diagrams.

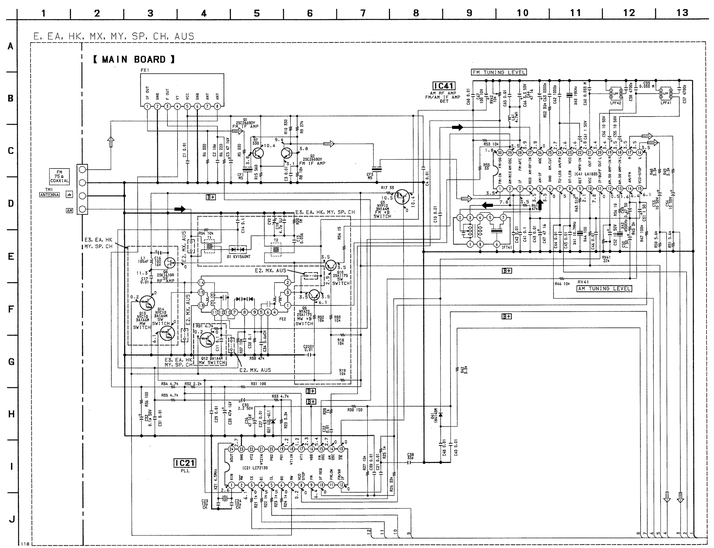
5-4. MAIN BOARD PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM (E, EA, HK, MX, MY, SP, CH, AUS)

• See page 56 IC Block Diagrams.

• Semiconductor Location

Ref. No.	Location
D1	C-5
D21	A-3
IC21	B-3
IC41	D-2
Q1	B-5
Q2	B-4
Q3	B-5
Q8	C-6
Q9	C-4
Q10	C-4
Q12	C-5
Q13	C-6
Q14	C-6





Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- B+ : B + Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ➡ : AM

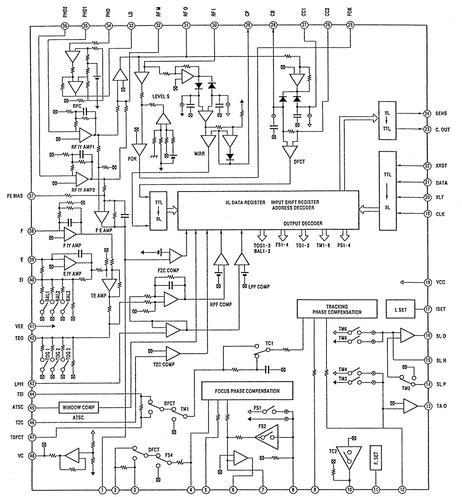
- Abbreviation
  AUS : Australian
  EA : Saudi Arabia
  HK : Hong Kong
  MX : Mexican
  MY : Malaysia
  SP : Singapore
  CH : Chinese

Note on Printed Wiring Board:

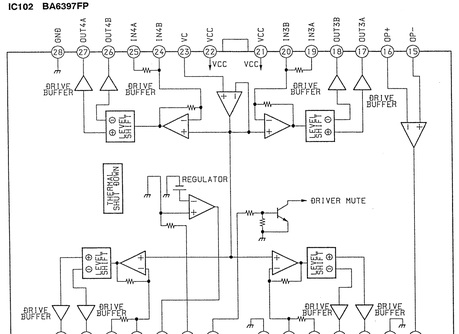
- ○——○ : parts extracted from the component side.
- : Pattern on the side which is seen.
- Abbreviation
  AUS : Australian
  EA : Saudi Arabia
  HK : Hong Kong
  MX : Mexican
  MY : Malaysia
  SP : Singapore
  CH : Chinese

• IC Block Diagrams (BD Board)

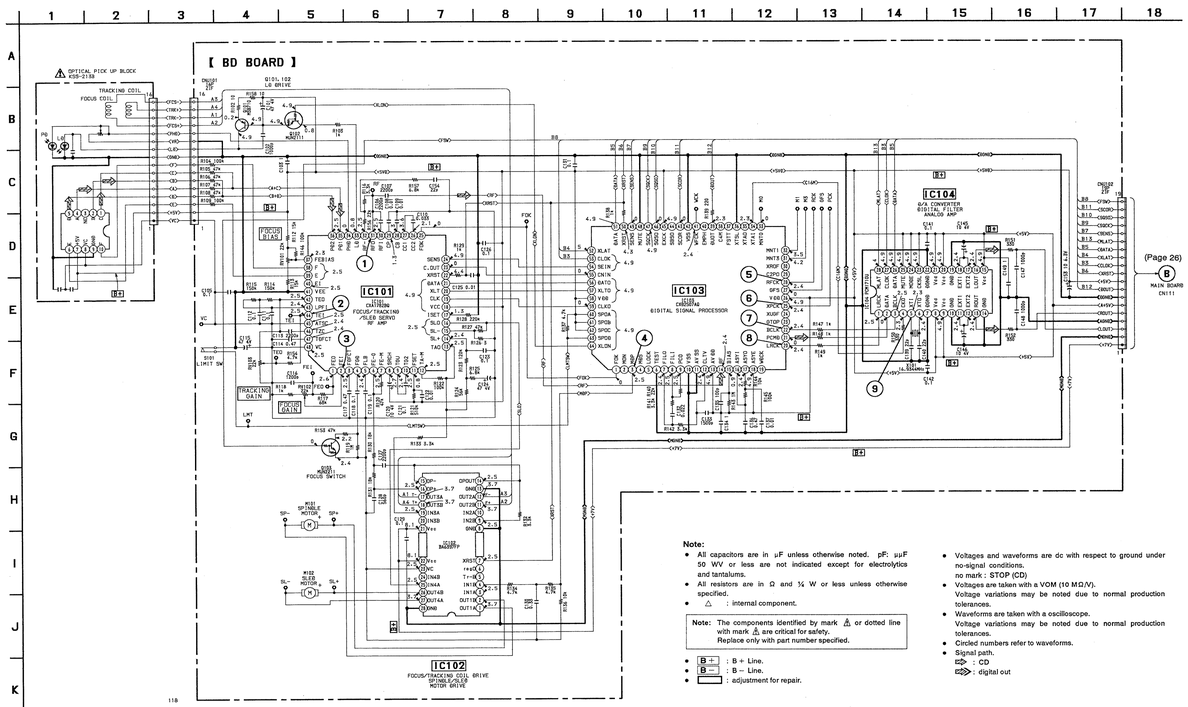
IC101 CXA1782BQ



IC102 BA6397FP



5-5. CD SECTION SCHEMATIC DIAGRAM



Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B + Line.
- B− : B − Line.
- : adjustment for repair.

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : STOP (CD)
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD
  ⇨ : digital out

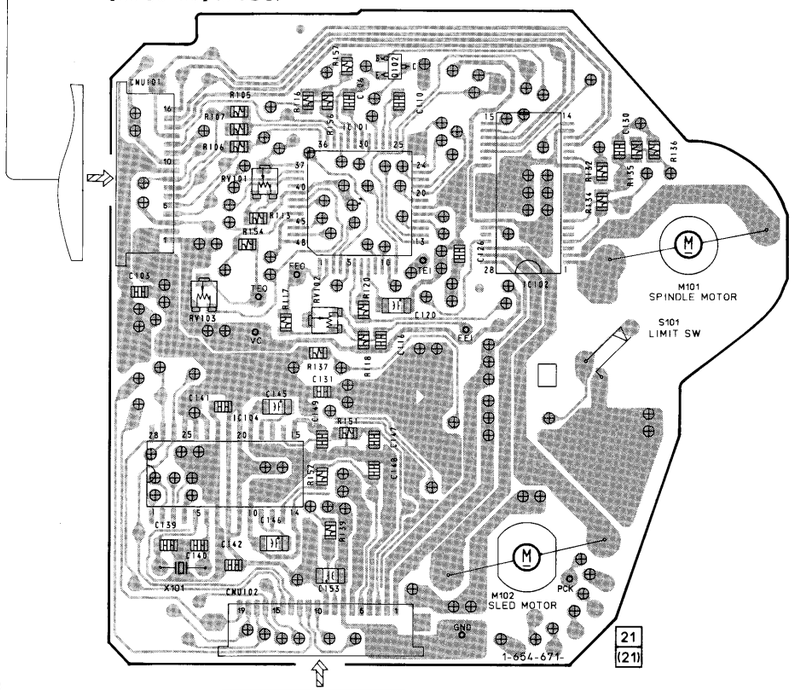
5-6. CD SECTION PRINTED WIRING BOARD

See page 20 for Circuit Boards Location.

【BD BOARD】(SIDE A)

1-654-671-

【BD BOARD】(SIDE B)



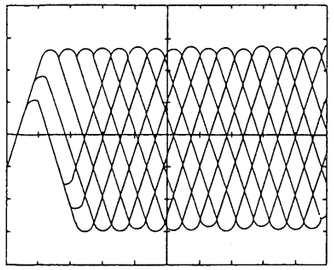
1-654-671-

Semiconductor Location

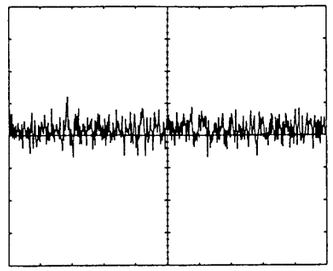
Ref. No.	Location
IC101	H-3
IC102	H-4
IC103	C-3
IC104	J-2
Q101	E-3
Q102	G-3
Q103	E-2

Waveforms

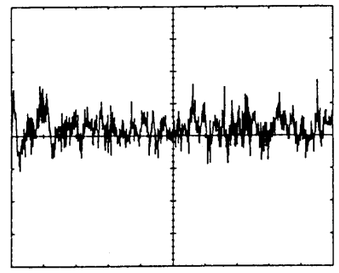
❶ IC101 ㉛ 1.4 Vp-p



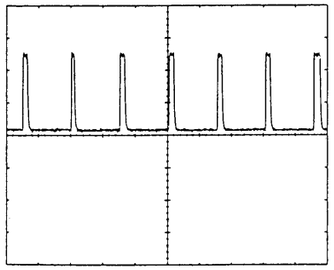
❷ IC101 ㊹ 8 mVp-p 0.2 ms/DIV



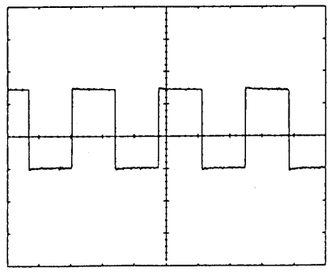
❸ IC101 ② 20 mVp-p 0.2 ms/DIV



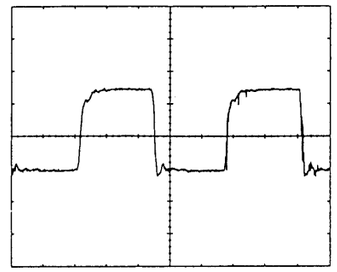
❹ IC103 ③ 2.4 Vp-p 7.5 μsec



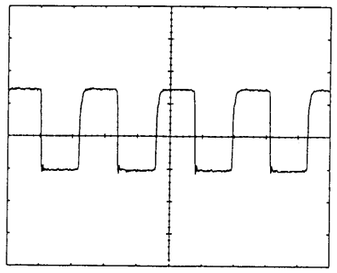
❺ IC103 ㉘ 5.1 Vp-p 137 μsec



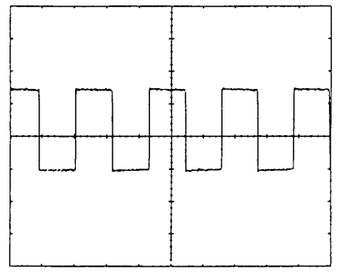
❻ IC103 ㉕ 5.1 Vp-p 232.7 nsec



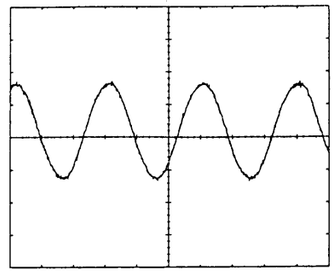
❼ IC103 ㉒ 5.1 Vp-p 472.7 nsec



❽ IC103 ⑳ 5.1 Vp-p 23 μsec



❾ IC104 ⑤ 3 Vp-p 16.9344 MHz



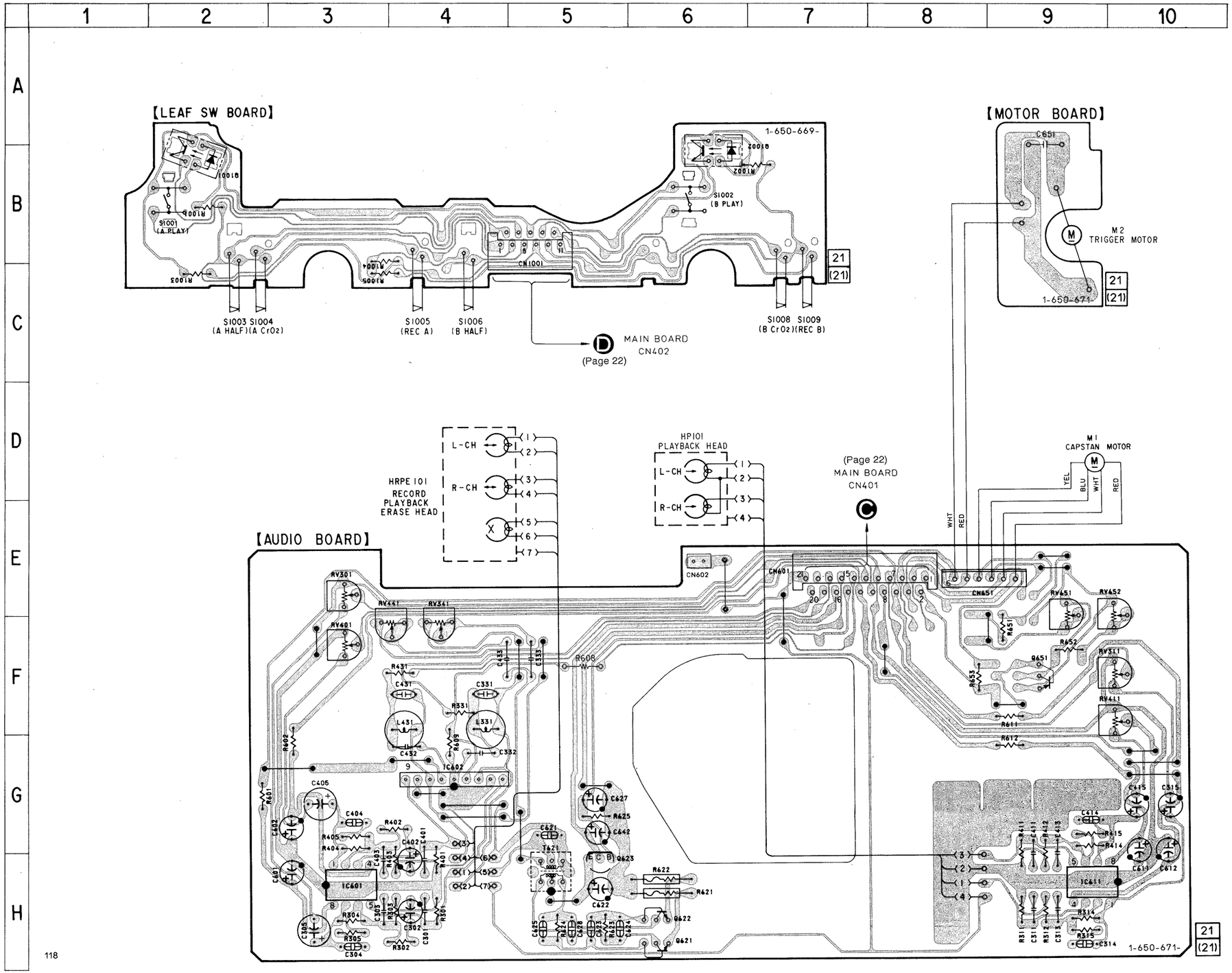
Note:

- ○——— : parts extracted from the component side.
- ⊕ : Through hole.
- ▒▒ : Patt rn on the side which is seen.

(The other layers' patt rns are not indicated.)

5-7. TAPE SECTION PRINTED WIRING BOARDS

• See page 20 for Circuit Boards Location.



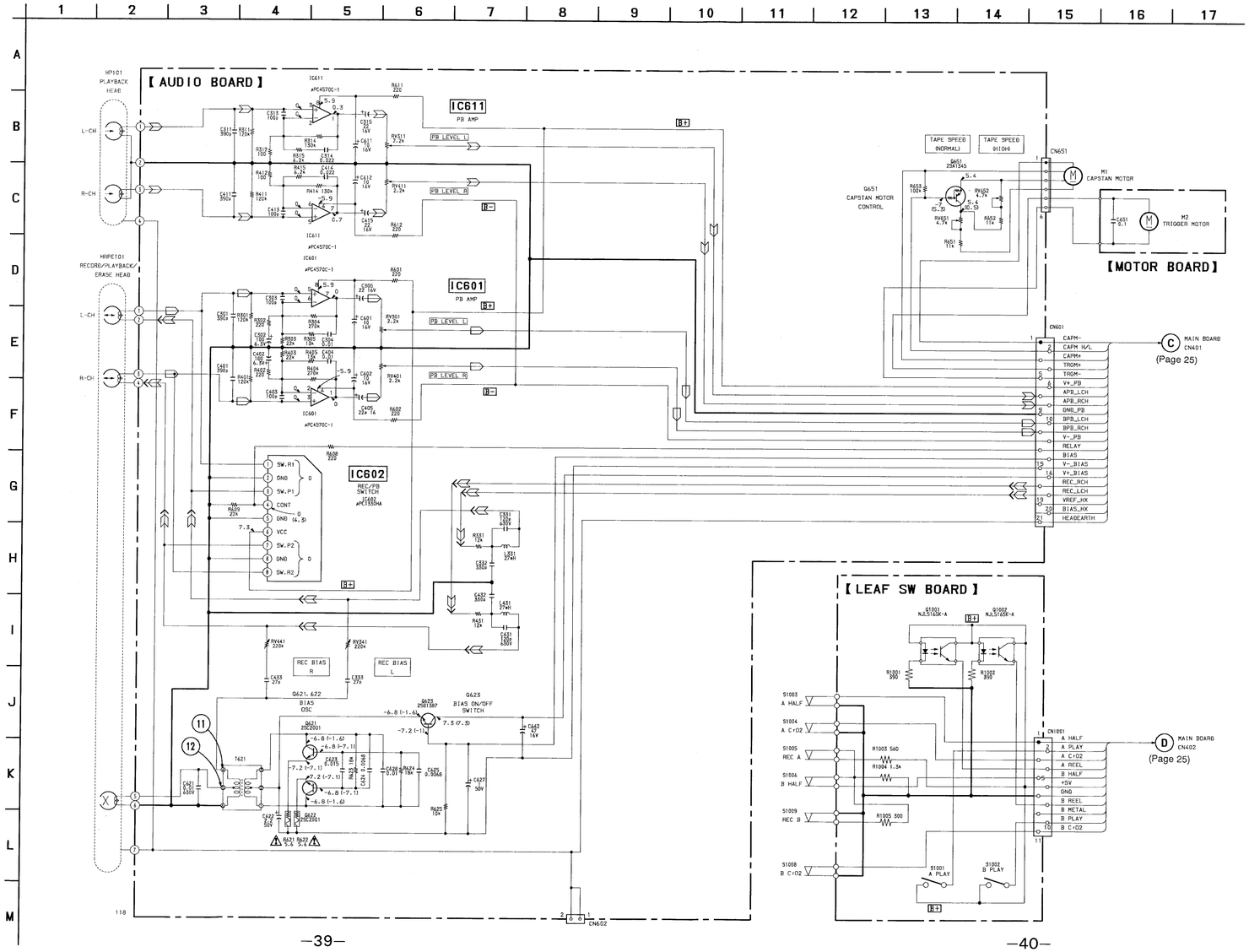
• **Semiconductor Location**

Ref. No.	Location
IC601	H-3
IC602	G-4
IC611	H-9
Q621	H-6
Q622	H-6
Q623	H-5
Q651	F-9
Q1001	B-2
Q1002	B-6

Note:

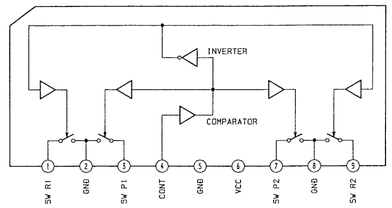
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

5-8. TAPE SECTION SCHEMATIC DIAGRAM



IC Block Diagram

IC602 μPC1330HA



Note:

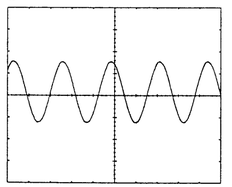
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

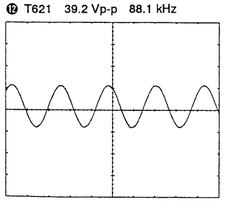
- B+ : B + Line.
- B− : B − Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PLAY (TC)
  ( ) : REC
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : PB (DECK B)
  : REC (DECK A)
  : PB (DECK B)

• Waveforms

⓫ T601 141 Vp-p 88.1 kHz



⓬ T621 39.2 Vp-p 88.1 kHz



5-9. SURROUND SECTION PRINTED WIRING BOARDS

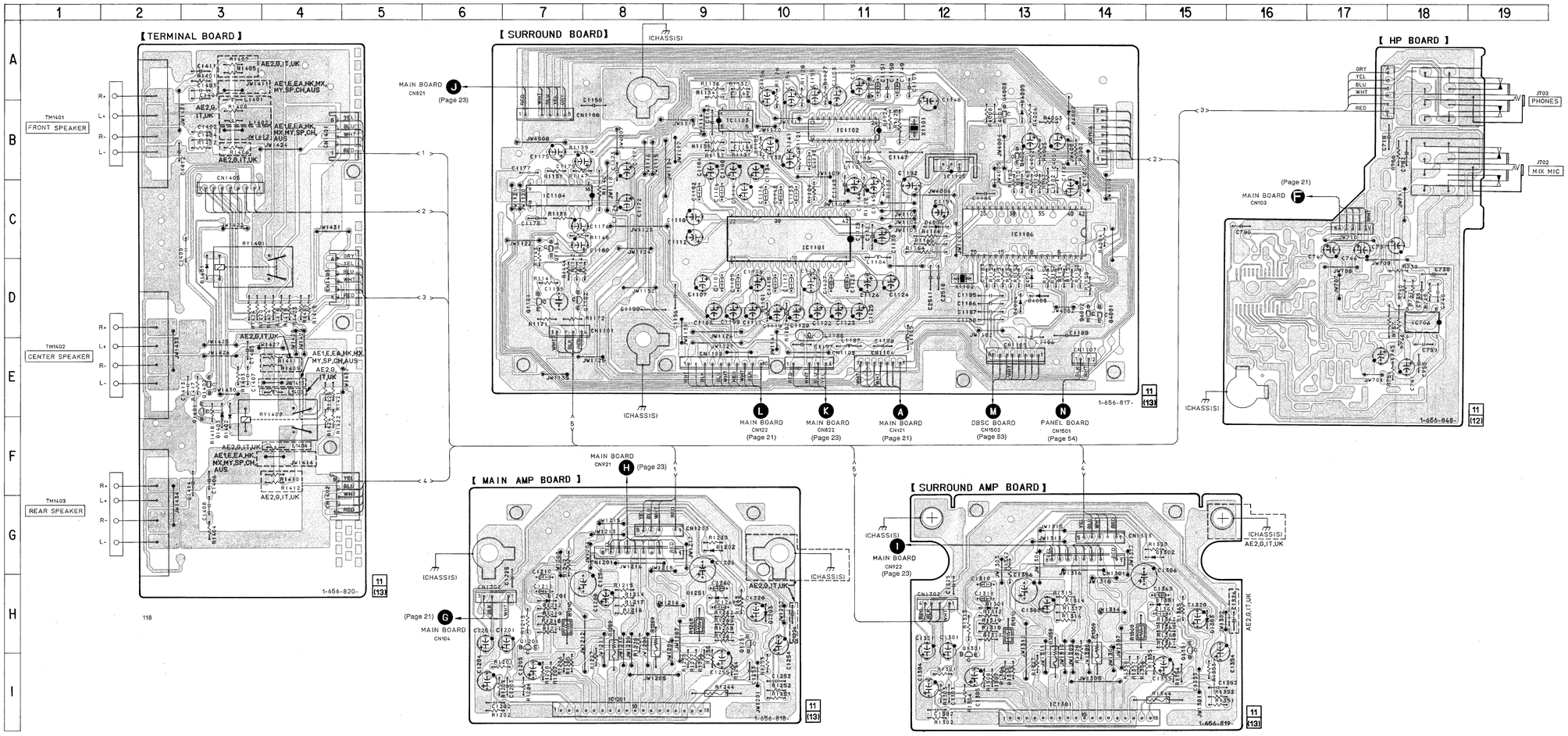
• See page 20 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
D1101	C-13
D1201	H-7
D1202	G-9
D1203	H-10
D1251	H-9
D1301	H-13
D1302	G-15
D1303	H-15
D1351	H-15
D1401	D-3
D1402	E-3
D1403	E-3
D4002	D-13
D4003	D-13
D4004	D-13
D4005	B-13
D4006	C-12
D4007	B-14
IC706	D-18
IC1101	C-10
IC1102	B-11
IC1103	B-9
IC1104	C-7
IC1105	B-12
IC1106	C-13
IC1201	I-8
IC1301	I-13
Q1101	D-7
Q1102	D-7
Q1103	C-7
Q1201	H-7
Q1251	H-10
Q1301	H-12
Q1351	H-15
Q1401	E-3
Q1402	E-3
Q4001	D-14
Q4002	D-14
Q4003	B-13
Q4004	B-13

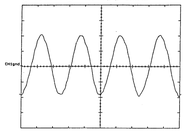
Note:

- ○——— : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.
- Abbreviation
  - G : German
  - IT : Italian
  - AUS : Australian
  - EA : Saudi Arabia
  - HK : Hong Kong
  - MX : Mexican
  - MY : Malaysia
  - SP : Singapore
  - CH : Chinese

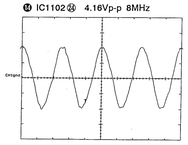


• Waveforms

IC1106 ㉘ 4.04Vp-p 8MHz



IC1102 ㉔ 4.16Vp-p 8MHz



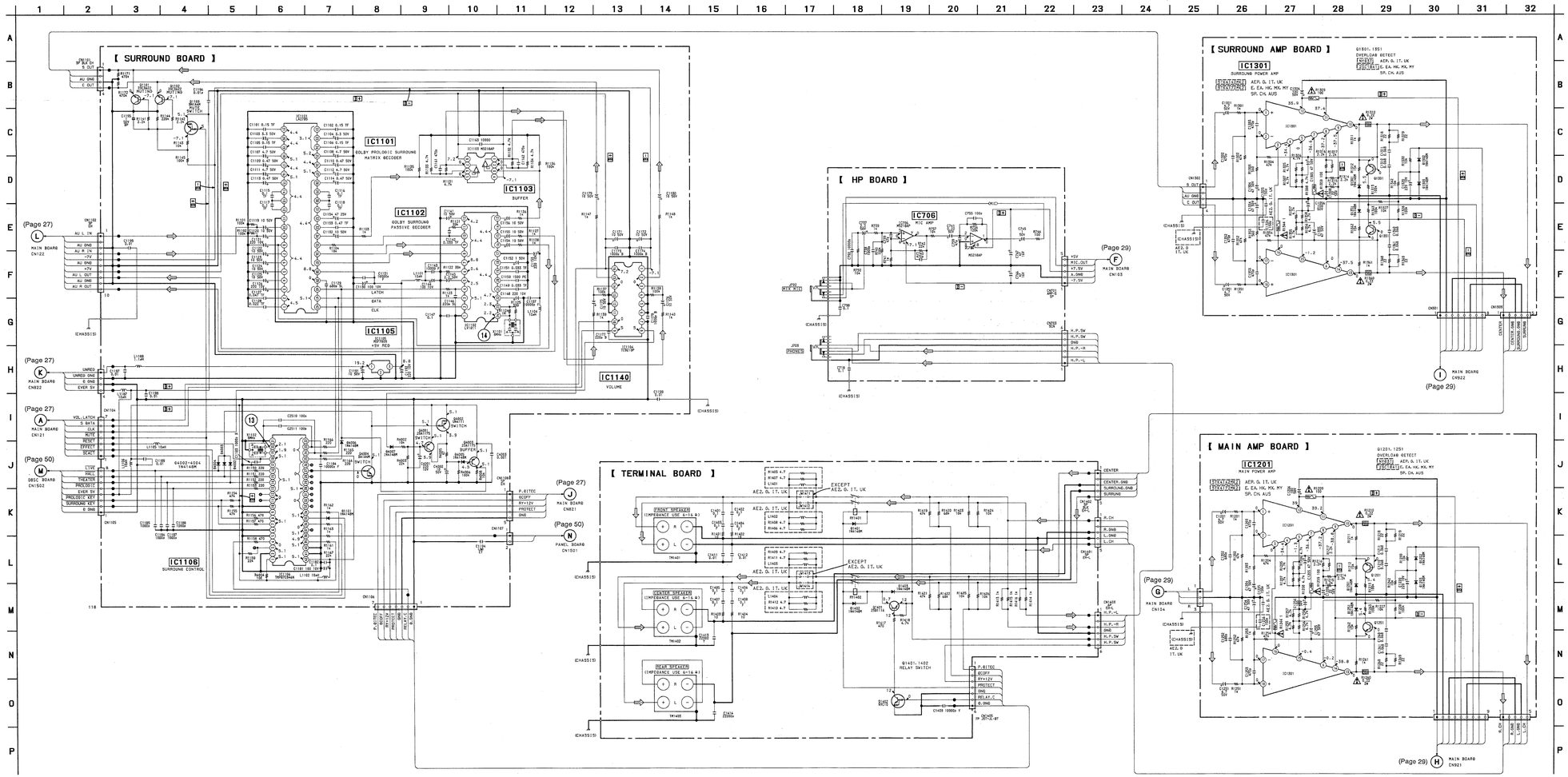
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- ⚠ : nonflammable resistor.
- ⚠ : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

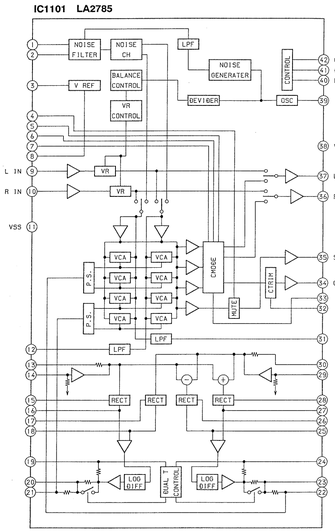
- B+ : B + Line.
- B− : B − Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
- Abbreviation
  G : German
  IT : Italian
  AUS : Australian
  EA : Saudi Arabia
  HK : Hong Kong
  MX : Mexican
  MY : Malaysia
  SP : Singapore
  CH : Chinese

5-10. SURROUND SECTION SCHEMATIC DIAGRAM

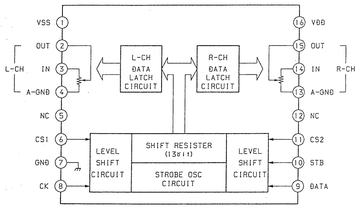


• IC Block Diagrams

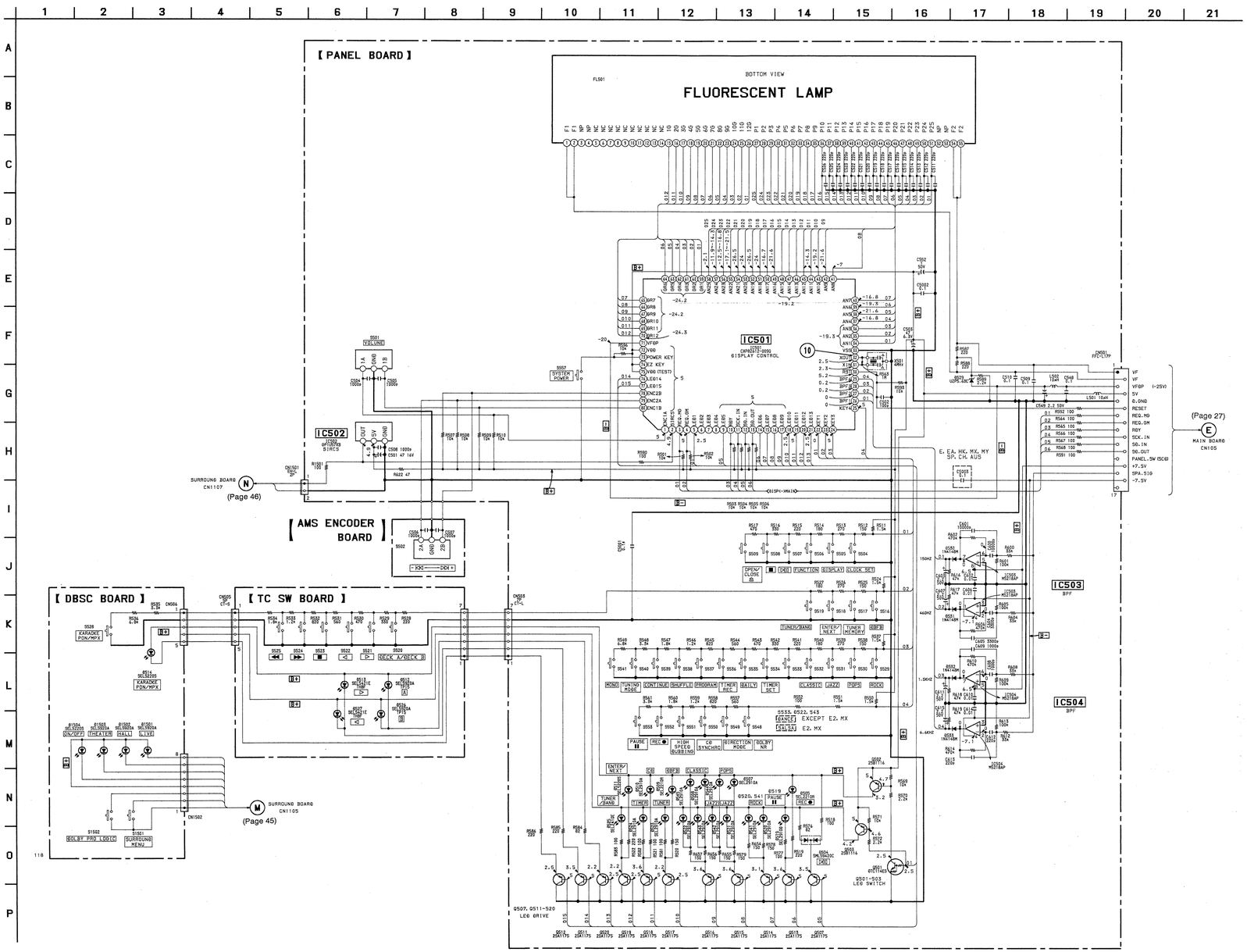
IC1101 LA2785



IC1104 TC9210P

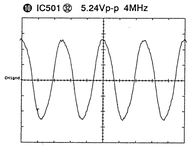


5-11. PANEL SECTION SCHEMATIC DIAGRAM



• Waveform

IC501 ⑳ 5.24Vp-p 4MHz

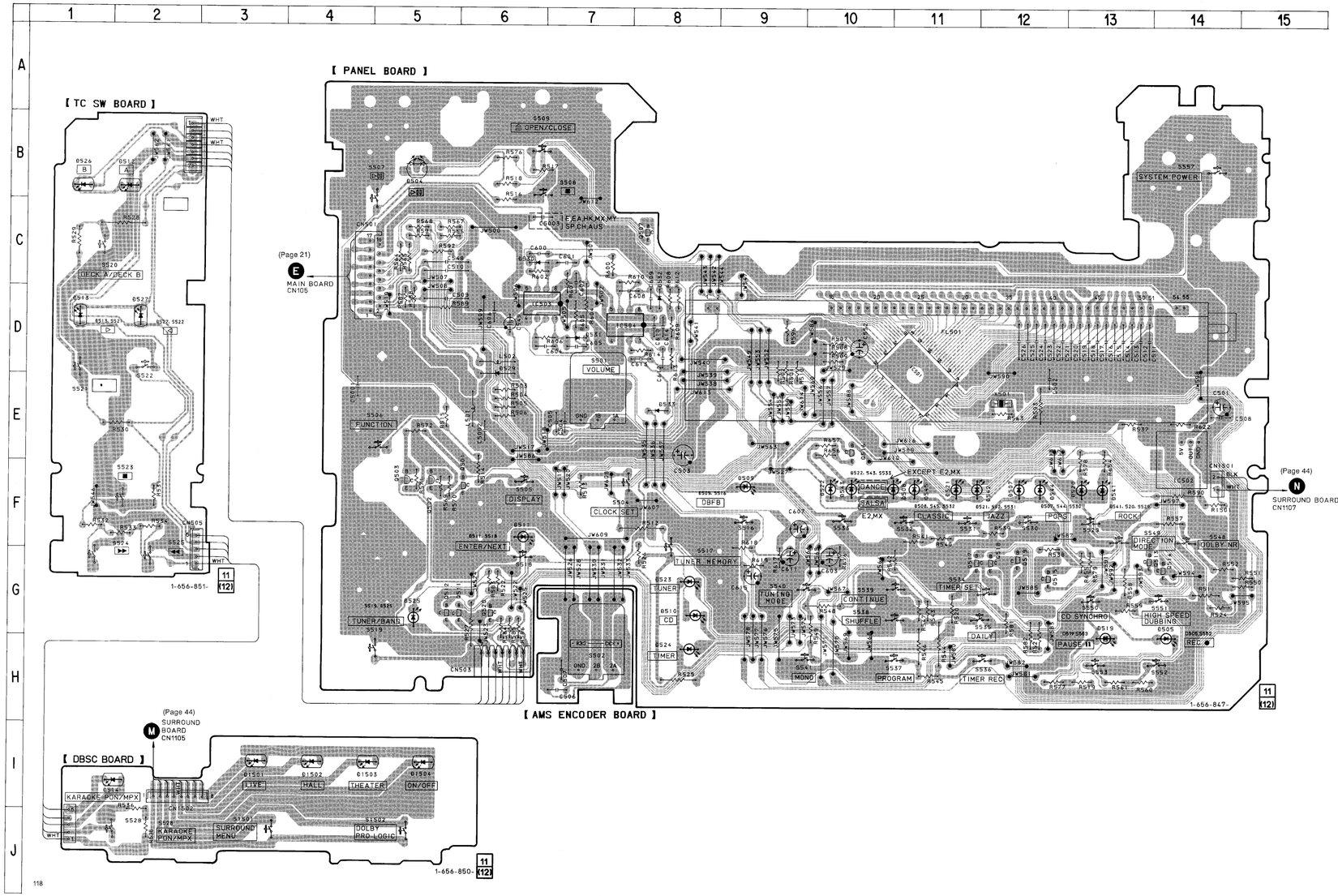


Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.

Note: The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

- B+ : B + Line.
- B− : B − Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Abbreviation
  AUS : Australian
  EA : Saudi Arabia
  HK : Hong Kong
  MX : Mexican
  MY : Malaysia
  SP : Singapore
  CH : Chinese



Semiconductor Location

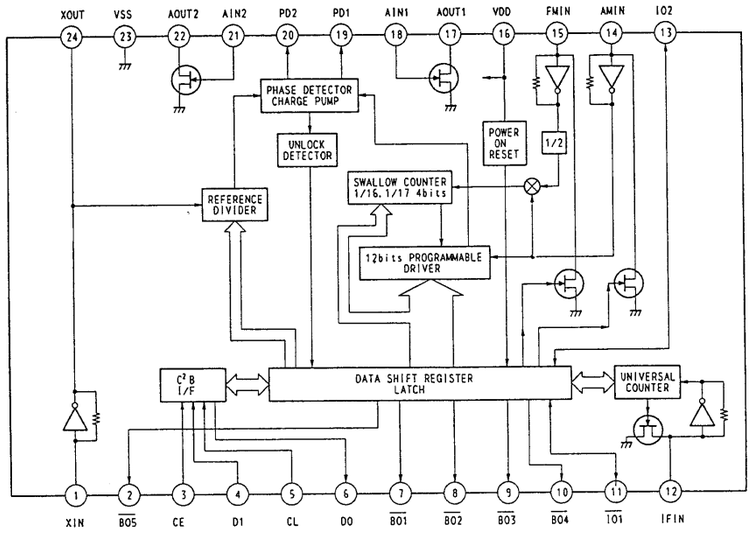
Ref. No.	Location
D504	B-5
D505	G-14
D507	F-12
D508	F-11
D509	F-9
D510	G-8
D511	F-6
D512	B-2
D513	D-1
D514	I-2
D519	G-13
D520	F-13
D521	F-11
D522	F-10
D523	G-8
D524	H-8
D525	G-5
D526	B-1
D527	D-2
D529	E-6
D530	C-6
D531	D-7
D532	D-8
D533	E-8
D541	F-13
D542	F-11
D543	F-10
D544	F-12
D545	F-11
D1501	I-3
D1502	I-4
D1503	I-4
D1504	I-5
IC501	D-11
IC502	F-14
IC503	D-6
IC504	D-7
Q501	F-6
Q502	F-5
Q503	F-5
Q507	C-8
Q511	G-6
Q512	G-5
Q513	G-13
Q514	G-14
Q515	G-12
Q516	E-10
Q517	G-11
Q518	G-12
Q519	G-12
Q520	G-6

Note:

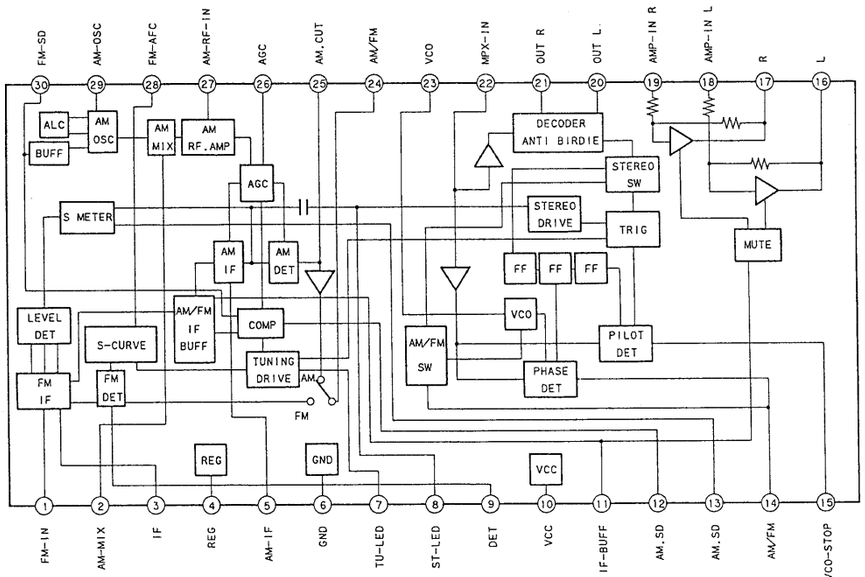
- ○——— : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.
- Abbreviation
  - AUS : Australian
  - EA : Saudi Arabia
  - HK : Hong Kong
  - MX : Mexican
  - MY : Malaysia
  - SP : Singapore
  - CH : Chinese

IC Block Diagrams (Main Section)

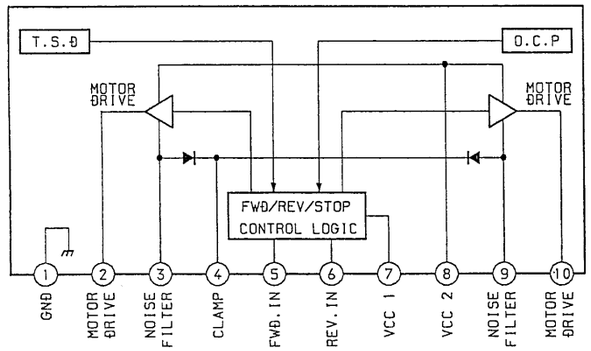
IC21 LC72130



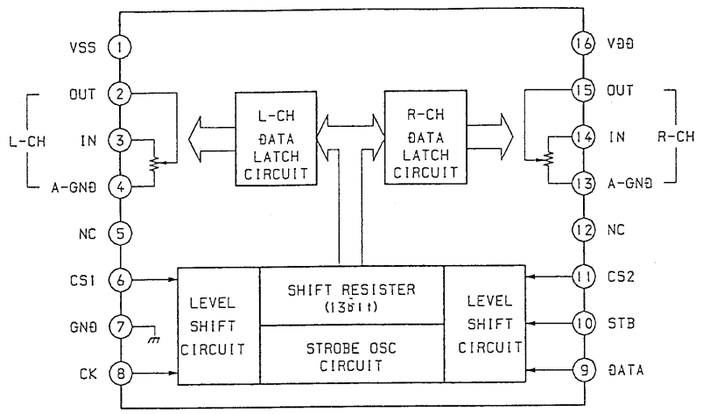
IC41 LA1835



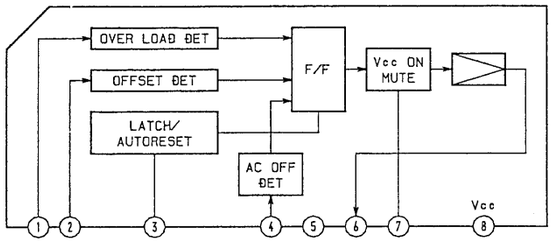
IC105, 402 LB1641



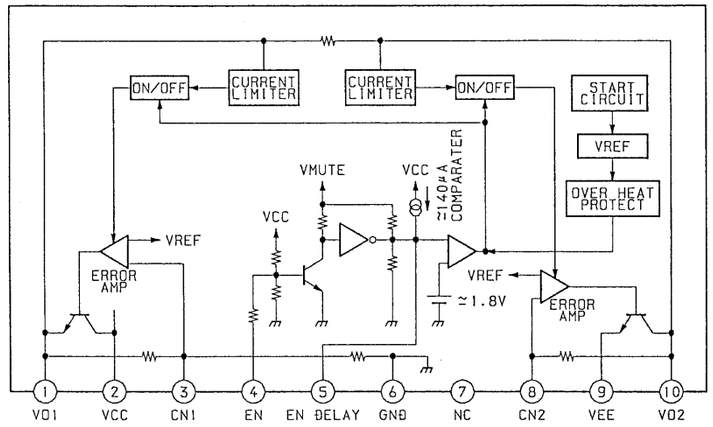
IC109 TC9210P



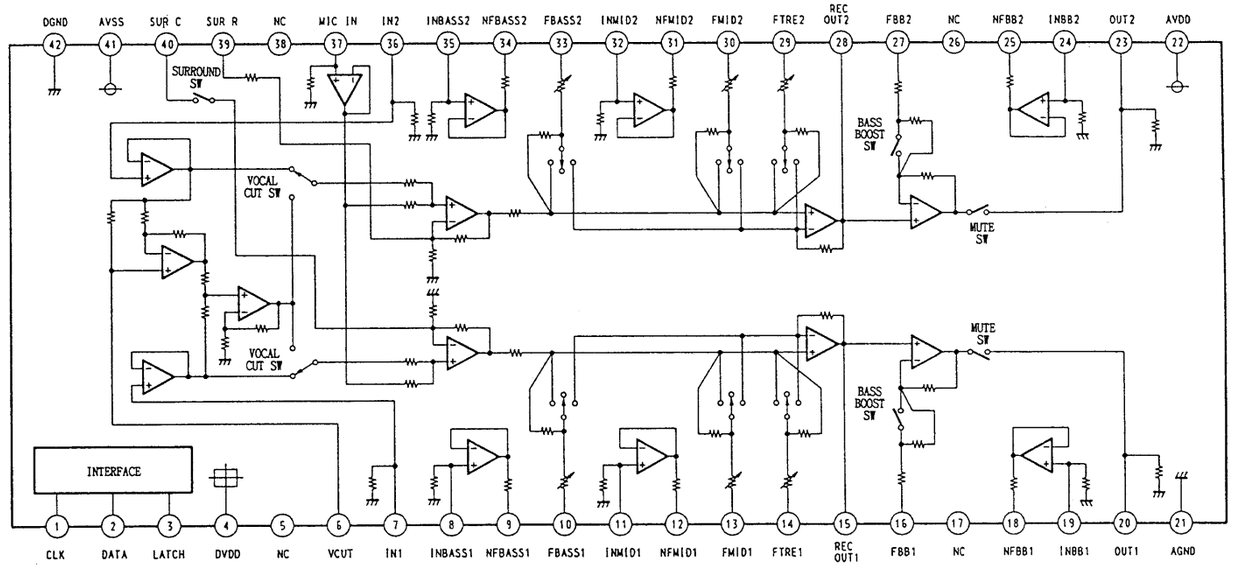
IC801 μPC1237HA



IC804 LA5617



IC108 M62423FP



SECTION 6
EXPLODED VIEWS

NOTE:

-XX and -X mean standardized parts, so they may have some difference from the original one.

Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)
↑ ↑
Parts Color Cabinet's Color

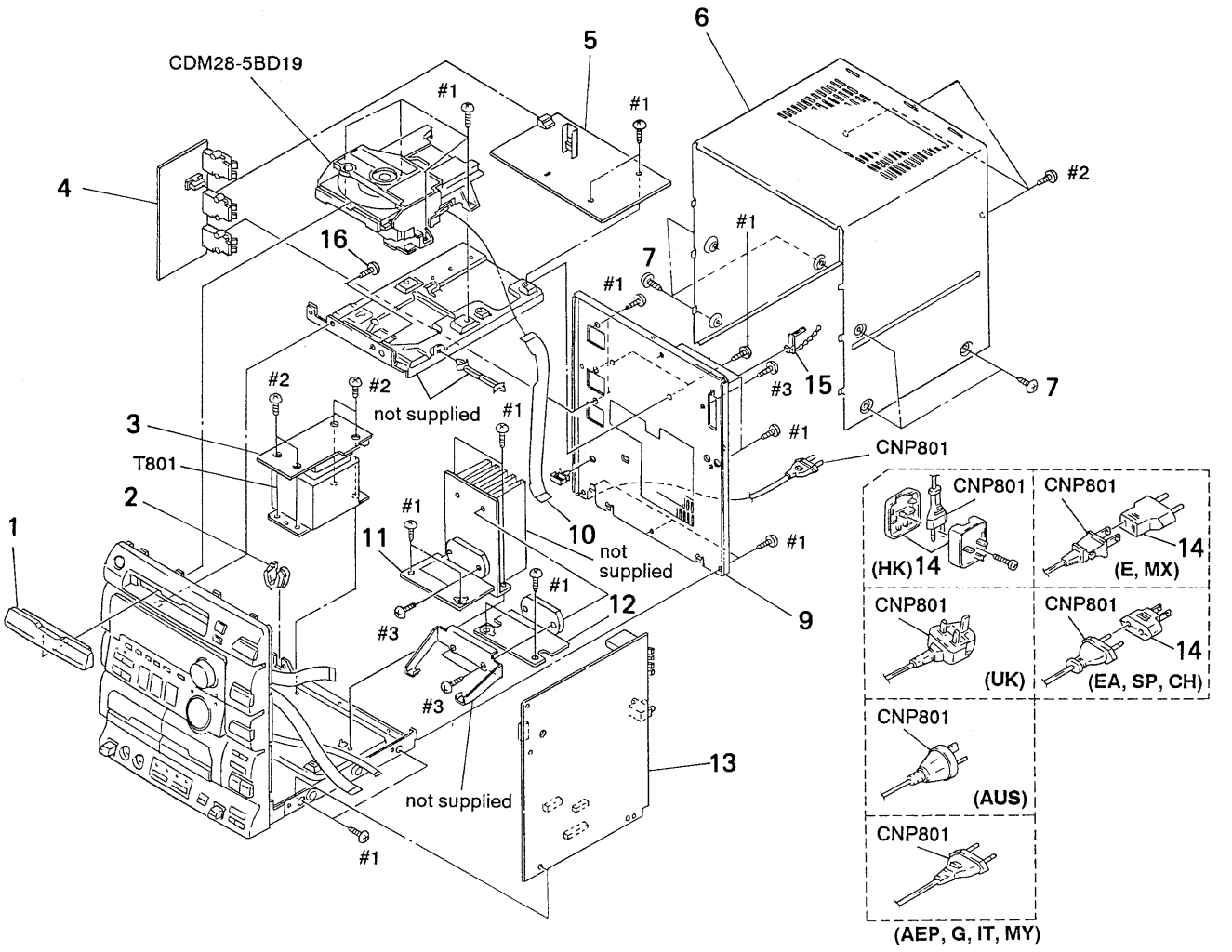
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Abbreviation

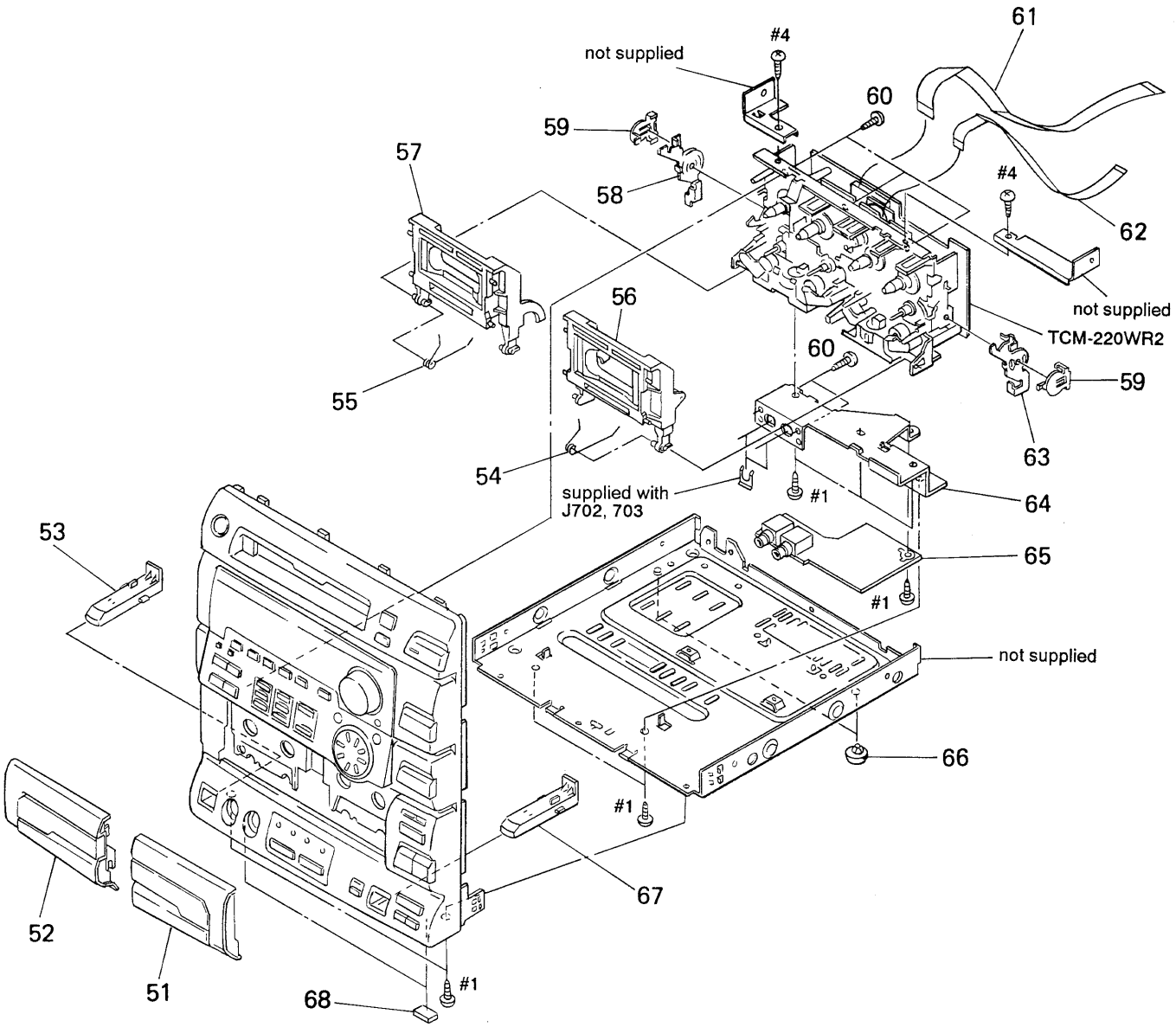
HK:	Hong Kong	AUS:	Australian	IT:	Italian
G:	German	MY:	Malaysia	MX:	Mexican
SP:	Singapore	EA:	Saudi Arabia	CH:	Chinese

(1) CASE, POWER SECTION



Ref. No.	Part No.	Description	Remark
1	4-971-955-01	PANEL, LOADING	
* 2	3-703-244-00	BUSHING (2104), CORD (EXCEPT E, MX)	
2	3-703-571-11	BUSHING (S) (4516), CORD (E, MX)	
* 3	1-656-849-11	TRANSFORMER BOARD	
* 4	A-4378-064-A	TERMINAL BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)	
* 4	A-4378-077-A	TERMINAL BOARD, COMPLETE (AEP1)	
* 4	A-4378-084-A	TERMINAL BOARD, COMPLETE (AEP2, UK, G, IT)	
* 5	A-4378-061-A	SURROUND BOARD, COMPLETE (E, EA, MX, MY, SP, CH HK, AUS)	
* 5	A-4378-074-A	SURROUND BOARD, COMPLETE (AEP1)	
* 5	A-4378-081-A	SURROUND BOARD, COMPLETE (AEP2, UK, G, IT)	
6	4-971-899-81	CASE	
7	3-363-099-01	SCREW (CASE 3 TP2)	
* 9	4-973-304-01	PANEL, BACK (AEP1)	
* 9	4-973-304-11	PANEL, BACK (AEP2)	
* 9	4-973-304-21	PANEL, BACK (IT)	
* 9	4-973-304-31	PANEL, BACK (G)	
* 9	4-973-304-41	PANEL, BACK (UK)	
* 9	4-973-305-01	PANEL, BACK (E)	
* 9	4-973-305-11	PANEL, BACK (EA)	
* 9	4-973-305-21	PANEL, BACK (AUS)	
* 9	4-973-305-31	PANEL, BACK (MX)	
* 9	4-973-305-41	PANEL, BACK (MY)	
* 9	4-973-305-51	PANEL, BACK (SP, CH)	
* 9	4-973-305-61	PANEL, BACK (HK)	
10	1-654-751-11	FLEXIBLE BOARD	
* 11	A-4378-062-A	MAIN AMP BOARD, COMPLETE (E, EA, MX, MY, SP, CH UK, AUS)	
* 11	A-4378-075-A	MAIN AMPLIFIER BOARD, COMPLETE (AEP1)	
* 11	A-4378-082-A	MAIN AMP BOARD, COMPLETE (AEP2, UK, G, IT)	
* 12	A-4378-063-A	SURROUND AMP BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)	
* 12	A-4378-076-A	SURROUND AMP BOARD, COPLETE (AEP1)	
* 12	A-4378-083-A	SURROUND AMP BOARD, COMPLETE (AEP2, UK, G, IT)	
* 13	A-4378-060-A	MAIN BOARD, COMPLETE (E2, MX)	
* 13	A-4378-065-A	MAIN BOARD, COMPLETE (E3, EA, MY, SP, CH, HK)	
* 13	A-4378-067-A	MAIN BOARD, COMPLETE (AUS)	
* 13	A-4378-073-A	MAIN BOARD, COMPLETE (AEP1)	
* 13	A-4378-080-A	MAIN BOARD, COMPLETE (AEP2)	
* 13	A-4378-085-A	MAIN BOARD, COMPLETE (G)	
* 13	A-4378-086-A	MAIN BOARD, COMPLETE (IT)	
* 13	A-4378-087-A	MAIN BOARD, COMPLETE (UK)	
⚠14	1-569-007-11	ADAPTER, CONVERSION 2P (E3, MX)	
⚠14	1-569-008-11	ADAPTER, CONVERSION 2P (EA, SP, CH)	
⚠14	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
15	4-956-370-12	BAND, PLUG FIXED (AUS)	
16	4-951-620-01	SCREW (2.6X8), +BVTP	
⚠CNP801	1-575-651-11	CORD, POWER (AEP, G, IT, EA, MY, SP, CH, HK)	
⚠CNP801	1-575-653-11	CORD, POWER (E, MX)	
⚠CNP801	1-696-847-11	CORD, POWER (AUS)	
⚠CNP801	1-751-520-21	CORD, POWER (UK)	
T801	1-427-972-11	TRANSFORMER, POWER (E, EA, MX, MY, SP, CH, HK, AUS)	
T801	1-427-973-11	TRANSFORMER, POWER (AEP, UK, G, IT)	

(2) MECHANISM DECK CHASSIS SECTION

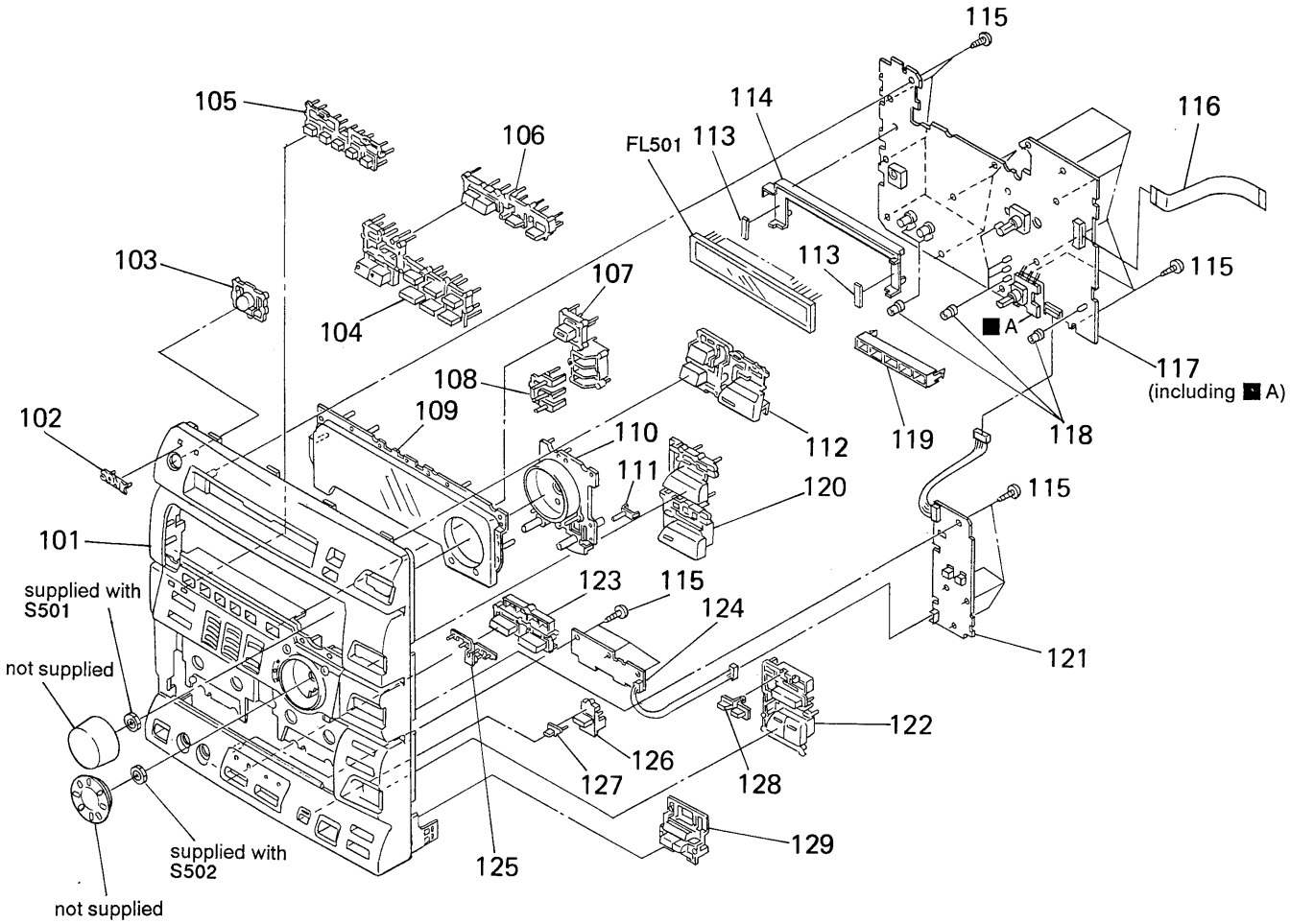


Ref. No.	Part No.	Description	Remark
51	X-4945-668-1	LID (B) ASSY, CASSETTE	
52	X-4945-667-1	LID (A) ASSY, CASSETTE	
53	4-971-956-01	BUTTON (EJ-A)	
54	4-959-232-11	SPRING (R), TORSION	
55	4-959-231-11	SPRING (L), TORSION	
56	X-4945-691-1	HOLDER (R) ASSY, CASSETTE	
57	X-4945-690-1	HOLDER (L) ASSY, CASSETTE	
58	3-367-709-21	LEVER (LOCK LEVER L)	
59	3-354-957-01	JOINT (LOCK LEVER)	

Ref. No.	Part No.	Description	Remark
60	4-951-620-01	SCREW (2.6X8), +BVTP	
61	1-769-689-31	WIRE (FLAT TYPE) (21 CORE)	
62	1-769-688-31	WIRE (FLAT TYPE) (11 CORE)	
* 63	4-965-877-11	LEVER (LOCK LEVER R)	
64	4-973-226-01	BRACKET (TC)	
* 65	1-656-848-11	HP BOARD	
66	4-965-822-01	FOOT	
67	4-971-957-01	BUTTON (EJ-B)	
68	4-930-336-61	FOOT (FELT)	

(3) FRONT PANEL SECTION

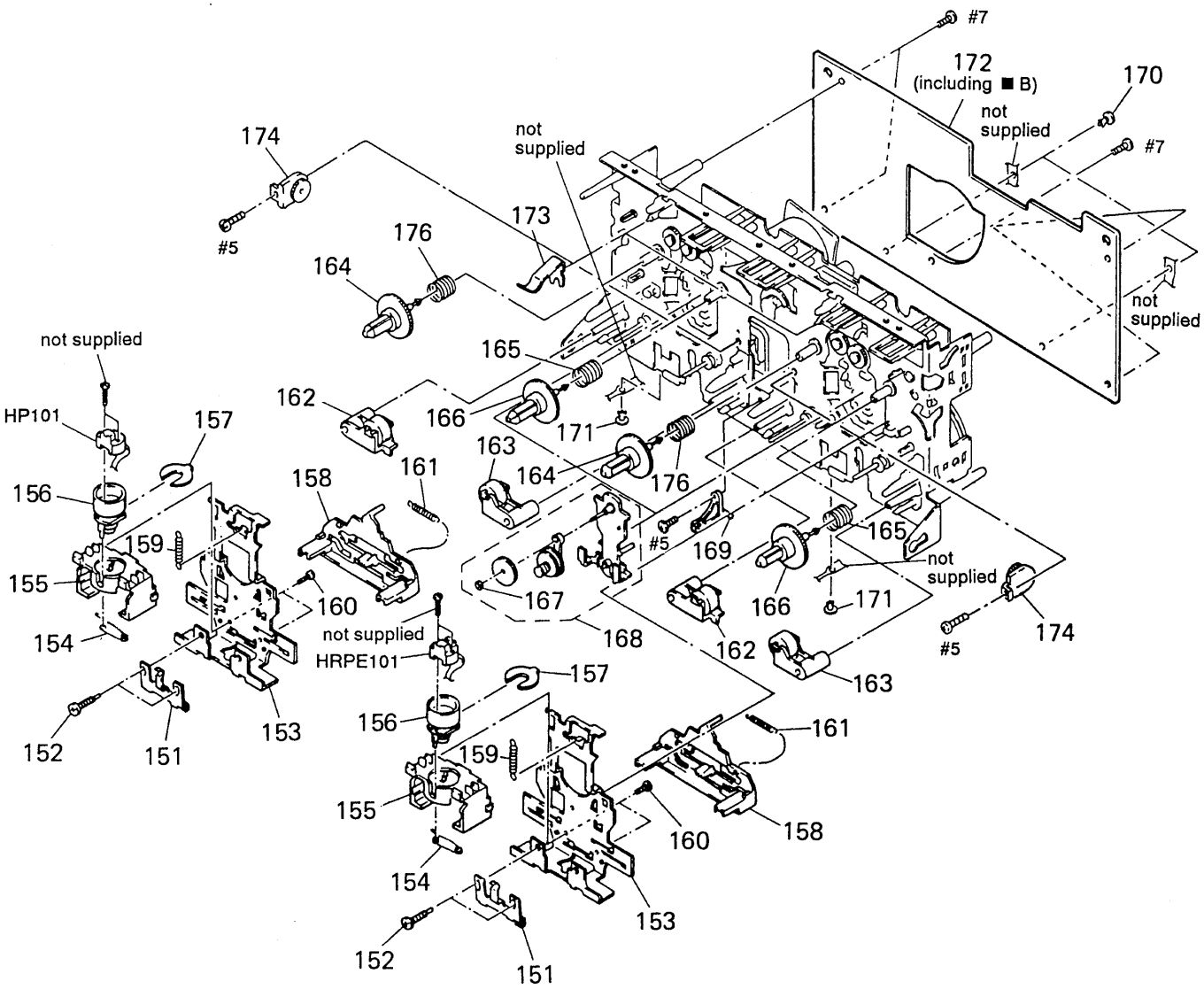
■ A: AMS ENCODER BOARD



Ref. No.	Part No.	Description	Remark
101	4-971-958-41	PANEL, FRONT (AEP, UK, G, IT)	
101	4-971-958-51	PANEL, FRONT (E, EA, MX, MY, SP, CH, HK, AUS)	
102	4-962-708-11	EMBLEM (4-A), SONY	
103	4-971-913-01	BUTTON (POWER)	
104	X-4945-681-1	BUTTON (B) ASSY	
105	4-970-865-11	BUTTON (EQ) (EXCEPT E2, MX)	
105	4-970-865-21	BUTTON (EQ) (E2, MX)	
106	4-970-863-11	BUTTON (A)	
107	X-4945-682-1	BUTTON (DBFB) ASSY	
108	4-970-873-01	INDICATOR (JOG)	
109	4-970-876-11	WINDOW (FLD), INDICATION	
110	4-970-867-11	BRACKET (VOLUME)	
111	4-970-872-11	INDICATOR (E/N)	
112	X-4945-671-1	BUTTON (CD) ASSY	
* 113	4-932-810-11	CUSHION (FL)	
* 114	4-971-014-11	HOLDER, FL TUBE	
115	4-951-620-01	SCREW (2.6X8), +BVTP	

Ref. No.	Part No.	Description	Remark
116	1-769-690-31	WIRE (FLAT TYPE) (17 CORE)	
* 117	A-4378-068-A	PANEL BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)	
* 117	A-4378-078-A	PANEL BOARD, COMPLETE (AEP, UK, G, IT)	
118	3-362-478-01	HOLDER (T), LED	
119	4-970-853-11	HOUSE, LAMP	
120	X-4945-672-1	BUTTON (F/T) ASSY	
* 121	1-656-851-11	TC SW BOARD	
122	X-4945-676-1	BUTTON (TC-PLAY) ASSY	
123	4-973-223-01	BUTTON (AV)	
* 124	1-656-850-11	DBSC SW BOARD	
125	4-973-224-01	INDICATOR (AV)	
126	4-970-880-11	BUTTON (KARAOKE)	
127	4-970-881-11	INDICATOR (KARAOKE)	
128	4-970-882-11	INDICATOR (A/B)	
129	4-972-642-01	BUTTON (TC-STOP)	
FL501	1-517-341-21	INDICATOR TUBE, FLUORESCENT	

(4) MECHANISM DECK SECTION-1 (TCM-220WR2)

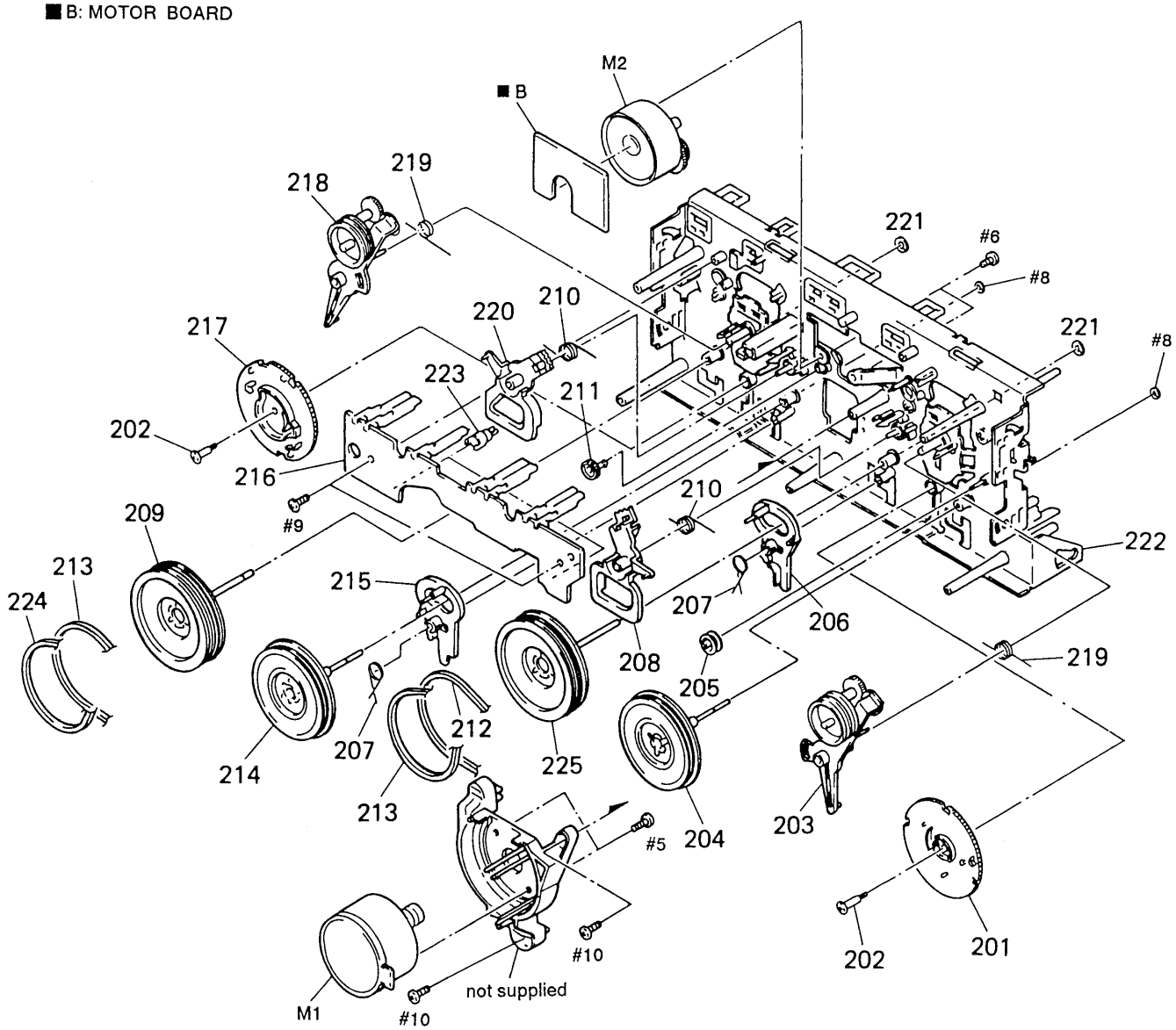


Ref. No.	Part No.	Description	Remark
151	3-908-560-01	SPRING, AZIMUTH ADJUSTMENT	
152	3-919-684-01	SCREW, AZIMUTH ADJUSTMENT	
* 153	X-3367-584-2	SLIDER (HEAD) ASSY	
154	3-908-556-01	SPRING, HEAD TOGGLE	
155	3-908-558-02	FITTING BLOCK, HEAD	
156	3-908-557-02	ROTARY BLOCK, HEAD	
* 157	3-908-559-01	STOPPER, AZIMUTH	
158	3-908-555-01	SLIDER (REV SLIDER)	
159	3-917-143-01	SPRING, TENSION	
160	3-388-848-01	SCREW (P2X6) (B TIGHT)	
161	3-911-113-01	SPRING, TENSION	
162	X-3370-643-1	PINCH LEVER (REV) ASSY	
163	X-3367-588-1	PINCH LEVER (FWD) ASSY	
164	3-908-613-01	GEAR (S), REEL	

Ref. No.	Part No.	Description	Remark
165	3-917-142-01	SPRING, COMPRESSION	
166	X-3367-594-1	REEL (T) ASSY	
167	3-669-465-01	WASHER (1.5), STOPPER	
168	X-3370-173-1	TU ASSY	
* 169	3-908-611-01	FULCRUM, HOLDER	
170	3-911-116-11	RIVET, PUSH	
171	3-911-116-21	RIVET, PUSH	
* 172	A-2007-131-A	AUDIO BOARD, COMPLETE	
173	3-915-490-01	DETENT, HALF	
174	3-354-963-01	DAMPER	
176	3-917-141-01	SPRING, COMPRESSION	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK) (DECK-A)	
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE) (DECK-B)	

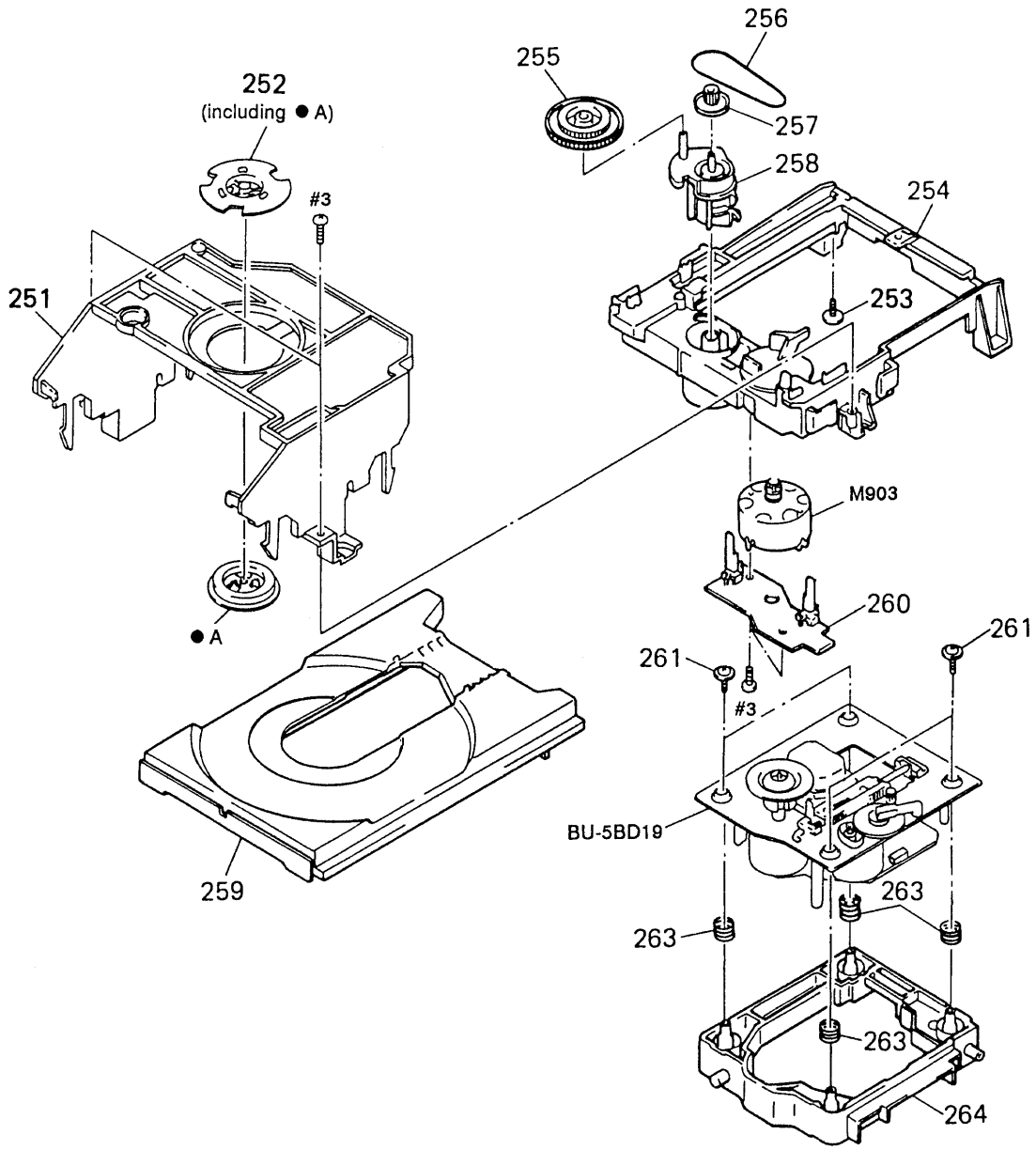
(5) MECHANISM DECK SECTION-2 (TCM-220WR2)

■ B: MOTOR BOARD



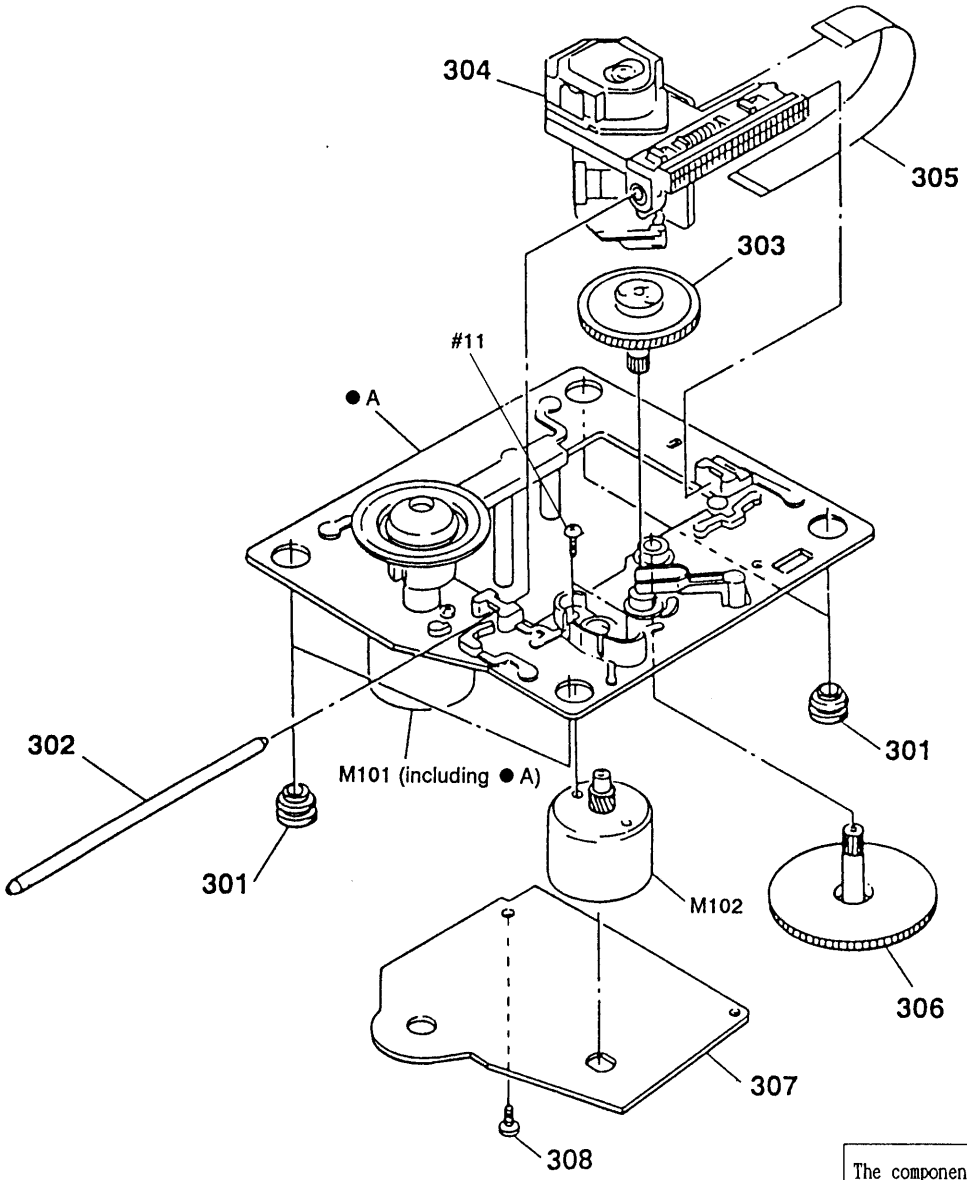
Ref. No.	Part No.	Description	Remark
201	3-908-597-01	CAM (A)	
202	3-908-608-11	SCREW, STEP	
203	X-3367-590-2	ARM (A) ASSY, FR	
204	X-3370-169-1	FLYWHEEL (AR) ASSY	
205	3-908-610-01	PULLEY, TENSION	
206	3-908-599-01	LEVER (REV-A)	
207	3-908-601-01	SPRING (REV LEVER), TORSION	
208	3-908-603-01	LEVER (TRIGGER A)	
209	X-3370-170-1	FLYWHEEL (BF) ASSY	
210	3-908-605-01	SPRING (TRIGGER), TORSION	
211	3-908-609-01	GEAR, TRIGGER	
212	3-913-845-01	BELT (A)	
213	3-913-846-01	BELT (FR)	
214	X-3370-171-1	FLYWHEEL (BR) ASSY	
215	3-908-600-01	LEVER (REV-B)	
* 216	1-650-669-21	LEAF SW BOARD	
217	3-908-598-01	CAM (B)	
218	X-3367-591-2	ARM (B) ASSY, FR	
219	3-911-114-11	SPRING (FR), TORSION	
220	3-908-604-01	LEVER (TRIGGER B)	
221	3-911-115-01	WASHER, STOPPER	
222	X-3367-587-1	CHASSIS ASSY, MECHANICAL	
* 223	3-381-776-01	HOLDER (LED)	
224	3-917-176-01	BELT (B)	
225	X-3370-172-1	FLYWHEEL (AF) ASSY	
M1	X-3369-110-1	MOTOR ASSY (CAPSTAN)	
M2	X-3369-111-1	MOTOR ASSY (TRIGGER)	

(6) CD MECHANISM SECTION-1 (CDM28-5BD19)



Ref. No.	Part No.	Description	Remark
251	4-960-835-11	HOLDER (M)	
252	1-452-719-11	MAGNET ASSY	
253	4-917-583-41	BRACKET, YOKE	
254	4-960-838-03	BASE (MD)	
255	4-960-842-01	GEAR (P)	
256	4-927-649-01	BELT	
257	4-960-841-01	PULLEY (S)	
* 258	4-960-839-01	CAM	
259	4-960-836-01	TABLE, DISC	
* 260	1-650-836-11	LOADING BOARD	
261	4-933-134-01	SCREW (+PTPWH M2.6X6)	
263	4-959-996-01	SPRING (932), COMPRESSION	
264	4-960-834-11	HOLDER (BU)	
M903	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

(7) CD MECHANISM SECTION-2 (CDM28-5BD19)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
301	4-951-940-01	INSULATOR (BU)	
302	4-917-565-01	SHAFT, SLED	
303	4-917-567-31	GEAR (M)	
⚠304	8-848-387-01	DEVICE, OPTICAL KSS-213BA/S-N	
305	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
306	4-917-564-01	GEAR (P), FLATNESS	
* 307	A-4673-402-A	BD BOARD, COMPLETE	
308	4-951-620-01	SCREW (2.6X8), +BVTP	
M101	X-4917-523-4	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	
M102	X-4917-504-1	MOTOR ASSY (SLED MOTOR)	

AUDIO **MOTOR**

SECTION 7
ELECTRICAL PARTS LIST

NOTE:
Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
-XX and -X mean standardized parts, so they may have some difference from the original one.
RESISTORS
All resistors are in ohms.
METAL:Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F:nonflammable
Abbreviation
HK: Hong Kong AUS: Australian IT: Italian
G: German MY: Malaysia MX: Mexican
SP: Singapore EA: Saudi Arabia CH: Chinese

Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description			Remark
*	A-2007-131-A	AUDIO BOARD, COMPLETE			
		**********			
		MOTOR BOARD			
		**********			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-124-443-00	ELECT	100uF	20%	10V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-136-434-11	FILM	120PF	5%	630V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-124-443-00	ELECT	100uF	20%	10V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20%	16V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-136-434-11	FILM	120PF	5%	630V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-126-157-11	ELECT	10uF	20%	16V
C602	1-126-157-11	ELECT	10uF	20%	16V
C611	1-124-907-11	ELECT	10uF	20%	50V
C612	1-124-907-11	ELECT	10uF	20%	50V
C621	1-136-601-11	FILM	0.01uF	5%	630V
C622	1-124-925-11	ELECT	2.2uF	20%	100V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
C651	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
* CN601	1-568-864-11	SOCKET, CONNECTOR 21P			
* CN602	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CN651	1-564-521-11	PLUG, CONNECTOR 6P			
		< IC >			
IC601	8-759-111-44	IC uPC4570C-1			
IC602	8-759-143-54	IC uPC1330HA			
IC611	8-759-111-44	IC uPC4570C-1			
		< COIL >			
L331	1-410-780-11	INDUCTOR	27mH		
L431	1-410-780-11	INDUCTOR	27mH		
		< TRANSISTOR >			
Q621	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q622	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q623	8-729-801-93	TRANSISTOR	2SD1387		
Q651	8-729-900-65	TRANSISTOR	DTA144ES		
		< RESISTOR >			
R301	1-247-881-00	CARBON	120K	5%	1/4W
R302	1-249-409-11	CARBON	220	5%	1/4W
R303	1-249-433-11	CARBON	22K	5%	1/4W
R304	1-247-889-00	CARBON	270K	5%	1/4W
R305	1-247-858-11	CARBON	13K	5%	1/4W
R311	1-247-881-00	CARBON	120K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description			Remark
R314	1-247-882-11	CARBON	130K	5%	1/4W
R315	1-247-850-11	CARBON	6.2K	5%	1/4W
R331	1-249-430-11	CARBON	12K	5%	1/4W
R401	1-247-881-00	CARBON	120K	5%	1/4W
R402	1-249-409-11	CARBON	220	5%	1/4W
R403	1-249-433-11	CARBON	22K	5%	1/4W
R404	1-247-889-00	CARBON	270K	5%	1/4W
R405	1-247-858-11	CARBON	13K	5%	1/4W
R411	1-247-881-00	CARBON	120K	5%	1/4W
R412	1-247-807-31	CARBON	100	5%	1/4W
R414	1-247-882-11	CARBON	130K	5%	1/4W
R415	1-247-850-11	CARBON	6.2K	5%	1/4W
R431	1-249-430-11	CARBON	12K	5%	1/4W
R601	1-249-409-11	CARBON	220	5%	1/4W
R602	1-249-409-11	CARBON	220	5%	1/4W
R608	1-249-409-11	CARBON	220	5%	1/4W
R609	1-249-433-11	CARBON	22K	5%	1/4W
R611	1-249-409-11	CARBON	220	5%	1/4W
R612	1-249-409-11	CARBON	220	5%	1/4W
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
R651	1-247-856-00	CARBON	11K	5%	1/4W
R652	1-247-856-00	CARBON	11K	5%	1/4W
R653	1-249-441-11	CARBON	100K	5%	1/4W

< VARIABLE RESISTOR >

RV301	1-238-598-11	RES, ADJ, CARBON	2.2K
RV311	1-238-598-11	RES, ADJ, CARBON	2.2K
RV341	1-238-551-11	RES, ADJ, CARBON	220K
RV401	1-238-598-11	RES, ADJ, CARBON	2.2K
RV411	1-238-598-11	RES, ADJ, CARBON	2.2K
RV441	1-238-551-11	RES, ADJ, CARBON	220K
RV651	1-238-599-11	RES, ADJ, CARBON	4.7K
RV652	1-238-599-11	RES, ADJ, CARBON	4.7K

< TRANSFORMER >

T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION

****

* A-4673-402-A BD BOARD, COMPLETE

****

< CAPACITOR >

C101	1-126-607-11	ELECT CHIP	47uF	20%	4V
C102	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C106	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C107	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C108	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C109	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C111	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C112	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C113	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C114	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C117	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C118	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C119	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C120	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C121	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C122	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C123	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C124	1-126-607-11	ELECT CHIP	47uF	20%	4V
C125	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C126	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C127	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C128	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C129	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C130	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C131	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C132	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C133	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C134	1-164-346-11	CERAMIC CHIP	1uF		16V
C135	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C136	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C137	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C139	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C140	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C141	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C142	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C145	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C146	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C147	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C148	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C149	1-164-346-11	CERAMIC CHIP	1uF		16V
C153	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C154	1-163-235-11	CERAMIC CHIP	22PF	5%	50V

< CONNECTOR >

CNU101	1-770-014-11	CONNECTOR, FFC/FPC 16P
CNU102	1-770-013-11	CONNECTOR, FFC/FPC 19P

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

BD DBSC SW

Ref. No.	Part No.	Description			Remark
		< IC >			
IC101	8-752-069-56	IC CXA1782BQ			
IC102	8-759-291-06	IC BA6397FP			
IC103	8-752-372-94	IC CXD2507AQ			
IC104	8-759-185-29	IC PCM1710U-B			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-R			
Q102	8-729-424-08	TRANSISTOR UN2111			
Q103	8-729-421-22	TRANSISTOR UN2211			
		< RESISTOR >			
R102	1-216-001-00	METAL CHIP	10	5%	1/10W
R103	1-216-049-00	METAL CHIP	1K	5%	1/10W
R104	1-216-097-00	METAL CHIP	100K	5%	1/10W
R105	1-216-089-00	METAL CHIP	47K	5%	1/10W
R106	1-216-089-00	METAL CHIP	47K	5%	1/10W
R107	1-216-089-00	METAL CHIP	47K	5%	1/10W
R108	1-216-089-00	METAL CHIP	47K	5%	1/10W
R109	1-216-097-00	METAL CHIP	100K	5%	1/10W
R112	1-216-077-00	METAL CHIP	15K	5%	1/10W
R113	1-216-077-00	METAL CHIP	15K	5%	1/10W
R114	1-216-101-00	METAL CHIP	150K	5%	1/10W
R115	1-216-101-00	METAL CHIP	150K	5%	1/10W
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R117	1-216-093-00	METAL CHIP	68K	5%	1/10W
R118	1-216-049-00	METAL CHIP	1K	5%	1/10W
R119	1-216-121-00	METAL CHIP	1M	5%	1/10W
R120	1-216-089-00	METAL CHIP	47K	5%	1/10W
R121	1-216-114-00	METAL GLAZE	510K	5%	1/10W
R122	1-216-097-00	METAL CHIP	100K	5%	1/10W
R123	1-216-099-00	METAL CHIP	120K	5%	1/10W
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W
R125	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R126	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R127	1-216-089-00	METAL CHIP	47K	5%	1/10W
R128	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R129	1-216-049-00	METAL CHIP	1K	5%	1/10W
R130	1-216-079-00	METAL CHIP	18K	5%	1/10W
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R134	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R135	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R136	1-216-073-00	METAL CHIP	10K	5%	1/10W
R137	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R138	1-216-049-00	METAL CHIP	1K	5%	1/10W
R139	1-216-033-00	METAL CHIP	220	5%	1/10W
R140	1-216-081-00	METAL CHIP	22K	5%	1/10W
R141	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R142	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R143	1-216-121-00	METAL CHIP	1M	5%	1/10W
R144	1-216-073-00	METAL CHIP	10K	5%	1/10W
R145	1-216-097-00	METAL CHIP	100K	5%	1/10W
R146	1-216-097-00	METAL CHIP	100K	5%	1/10W
R147	1-216-049-00	METAL CHIP	1K	5%	1/10W
R148	1-216-049-00	METAL CHIP	1K	5%	1/10W
R149	1-216-049-00	METAL CHIP	1K	5%	1/10W
R150	1-216-037-00	METAL CHIP	330	5%	1/10W
R151	1-216-037-00	METAL CHIP	330	5%	1/10W
R152	1-216-037-00	METAL CHIP	330	5%	1/10W
R153	1-216-089-00	METAL CHIP	47K	5%	1/10W
R154	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W
R157	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R158	1-216-001-00	METAL CHIP	10	5%	1/10W
		< VARIABLE RESISTOR >			
RV101	1-241-396-11	RES, ADJ, METAL GLAZE 22K			
RV102	1-241-396-11	RES, ADJ, METAL GLAZE 22K			
RV103	1-241-396-11	RES, ADJ, METAL GLAZE 22K			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT SW)			
		< VIBRATOR >			
X101	1-579-280-11	VIBRATOR, CRYSTAL (16.9344MHz)			
**********					
*	1-656-850-11	DBSC SW BOARD			
		**********			
		< CONNECTOR >			
* CN1502	1-568-935-11	PIN, CONNECTOR 8P			
		< DIODE >			
D514	8-719-812-44	LED TL0124 (KARAOKE PON/MPX)			
D1501	8-719-033-06	LED SEL5920A (LIVE)			
D1502	8-719-033-06	LED SEL5920A (HALL)			
D1503	8-719-033-06	LED SEL5920A (THEATER)			
D1504	8-719-812-44	LED TL0124 (ON/OFF)			
		< RESISTOR >			
R535	1-249-423-11	CARBON	3.3K	5%	1/4W
R536	1-249-427-11	CARBON	6.8K	5%	1/4W

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S528	1-572-184-11	SWITCH, KEYBOARD (KARAOKE PON MPX)			
S1501	1-572-184-11	SWITCH, KEYBOARD (SURROUND MENU)			
S1502	1-572-184-11	SWITCH, KEYBOARD (DOLBY PRO LOGIC)			
**********					
*	1-656-848-11	HP BOARD			
		********			
*	4-942-204-01	PLATE, GROUND			
		< CAPACITOR >			
C718	1-164-159-11	CERAMIC	0.1uF		50V
C737	1-124-257-00	ELECT	2.2uF	20%	50V
C738	1-162-294-31	CERAMIC	0.001uF	10%	50V
C739	1-162-215-31	CERAMIC	47PF	5%	50V
C740	1-162-290-31	CERAMIC	470PF	10%	50V
C741	1-124-464-11	ELECT	0.22uF	20%	50V
C745	1-126-160-11	ELECT	1uF	20%	50V
C746	1-124-589-11	ELECT	47uF	20%	16V
C747	1-124-589-11	ELECT	47uF	20%	16V
C755	1-162-282-31	CERAMIC	100PF	10%	50V
C759	1-162-215-31	CERAMIC	47PF	5%	50V
C790	1-164-159-11	CERAMIC	0.1uF		50V
C792	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< IC >			
IC706	8-759-634-51	IC M5218AP			
		< JACK >			
J702	1-507-854-00	JACK, PHONE (MIX MIC)			
J703	1-507-854-00	JACK, PHONE (PHONES)			
		< RESISTOR >			
R739	1-249-417-11	CARBON	1K	5%	1/4W
R740	1-249-441-11	CARBON	100K	5%	1/4W
R741	1-249-417-11	CARBON	1K	5%	1/4W
R742	1-249-433-11	CARBON	22K	5%	1/4W
R746	1-247-807-31	CARBON	100	5%	1/4W
R750	1-249-429-11	CARBON	10K	5%	1/4W
R756	1-247-881-00	CARBON	120K	5%	1/4W
R757	1-249-429-11	CARBON	10K	5%	1/4W
**********					
*	1-650-669-21	LEAF SW BOARD			
		**********			
		< CONNECTOR >			
* CN1001	1-568-854-11	SOCKET, CONNECTOR 11P			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q1001	8-719-710-02	TRANSISTOR PHOTO REFLECTOR NJL5165K-A			
Q1002	8-719-710-02	TRANSISTOR PHOTO REFLECTOR NJL5165K-A			
		< RESISTOR >			
R1001	1-249-412-11	CARBON	390	5%	1/4W
R1002	1-249-412-11	CARBON	390	5%	1/4W
R1003	1-249-414-11	CARBON	560	5%	1/4W
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W
R1005	1-247-818-11	CARBON	300	5%	1/4W
		< SWITCH >			
S1001	1-692-832-11	SWITCH, PUSH (1 KEY) (A PLAY)			
S1002	1-692-832-11	SWITCH, PUSH (1 KEY) (B PLAY)			
S1003	1-572-248-11	SWITCH, LEAF (A HALF)			
S1004	1-571-281-21	SWITCH, LEAF (A CrO2)			
S1005	1-571-281-21	SWITCH, LEAF (REC A))			
S1006	1-572-248-11	SWITCH, LEAF (B HALF)			
S1008	1-571-281-21	SWITCH, LEAF (B CrO2)			
S1009	1-571-281-21	SWITCH, LEAF (REC B)			
**********					
*	1-650-836-11	LOADING BOARD			
		**********			
		< CONNECTOR >			
* CN291	1-568-943-11	PIN, CONNECTOR 5P			
		< SWITCH >			
S291	1-572-086-11	SWITCH, LEAF (LOAD OUT)			
S292	1-572-086-11	SWITCH, LEAF (LOAD IN)			
**********					
*	A-4378-073-A	MAIN BOARD, COMPLETE (AE1)			
*	A-4378-080-A	MAIN BOARD, COMPLETE (AE2)			
*	A-4378-087-A	MAIN BOARD, COMPLETE (UK)			
*	A-4378-085-A	MAIN BOARD, COMPLETE (G)			
*	A-4378-086-A	MAIN BOARD, COMPLETE (IT)			
*	A-4378-060-A	MAIN BOARD, COMPLETE (E2, MX)			
*	A-4378-065-A	MAIN BOARD, COMPLETE (E3, EA, MY, SP, CH, HK)			
*	A-4378-067-A	MAIN BOARD, COMPLETE (AUS)			
		**********			
	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S			
		< CAPACITOR >			
C1	1-162-306-11	CERAMIC	0.01uF	30%	16V
C2	1-162-205-31	CERAMIC	18PF	5%	50V
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V
C4	1-162-306-11	CERAMIC	0.01uF	30%	16V
C5	1-126-967-11	ELECT	47uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C6	1-162-306-11	CERAMIC	0.01uF	30%	16V
					(AE2, UK, G, IT)
C10	1-162-306-11	CERAMIC	0.01uF	30%	16V
C11	1-164-159-11	CERAMIC	0.1uF		50V
					(E3, EA, MY, SP, CH, HK)
C13	1-164-159-11	CERAMIC	0.1uF		50V
C14	1-164-159-11	CERAMIC	0.1uF		50V
					(E3, EA, MY, SP, CH, HK)
C15	1-136-162-00	FILM	0.056uF	5%	50V
					(E3, EA, MY, SP, CH, HK)
C16	1-126-933-11	ELECT	100uF	20%	16V
					(E3, EA, MY, SP, CH, HK)
C17	1-162-306-11	CERAMIC	0.01uF	30%	16V
					(E3, EA, MY, SP, CH, HK)
C18	1-162-195-31	CERAMIC	4.7PF	10%	50V
					(E3, EA, MY, SP, CH, HK)
C19	1-102-527-11	CERAMIC	82PF	5%	50V
					(AEP, UK)
C20	1-162-211-31	CERAMIC	33PF	5%	50V
					(AE2, UK, G, IT)
C21	1-162-306-11	CERAMIC	0.01uF	30%	16V
C22	1-162-306-11	CERAMIC	0.01uF	30%	16V
C23	1-162-199-31	CERAMIC	10PF	5%	50V
C24	1-162-199-31	CERAMIC	10PF	5%	50V
C25	1-162-306-11	CERAMIC	0.01uF	30%	16V
					(E3, EA, MY, SP, CH, HK)
C26	1-126-967-11	ELECT	47uF	20%	16V
C27	1-162-306-11	CERAMIC	0.01uF	30%	16V
C28	1-126-967-11	ELECT	47uF	20%	16V
C29	1-162-306-11	CERAMIC	0.01uF	30%	16V
C30	1-124-257-00	ELECT	2.2uF	20%	50V
C31	1-136-153-00	FILM	0.01uF	5%	50V
C32	1-124-463-00	ELECT	0.1uF	20%	50V
C33	1-164-159-11	CERAMIC	0.1uF		50V
C34	1-162-196-31	CERAMIC	5.6PF	10%	50V
			(G, IT, E, EA, MX, MY, SP, CH, HK, AUS)		
C34	1-162-198-31	CERAMIC	8.2PF	10%	50V
					(AEP, UK)
C38	1-162-211-31	CERAMIC	33PF	5%	50V
C39	1-162-306-11	CERAMIC	0.01uF	30%	16V
C40	1-162-306-11	CERAMIC	0.01uF	30%	16V
C41	1-164-159-11	CERAMIC	0.1uF		50V
C42	1-162-306-11	CERAMIC	0.01uF	30%	16V
C43	1-162-306-11	CERAMIC	0.01uF	30%	16V
C44	1-162-306-11	CERAMIC	0.01uF	30%	16V
C45	1-162-306-11	CERAMIC	0.01uF	30%	16V
C46	1-162-306-11	CERAMIC	0.01uF	30%	16V
C47	1-126-967-11	ELECT	47uF	20%	16V
C48	1-162-306-11	CERAMIC	0.01uF	30%	16V
C49	1-124-902-00	ELECT	0.47uF	20%	50V
C50	1-124-903-11	ELECT	1uF	20%	50V
C51	1-124-903-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description			Remark
C52	1-124-927-11	ELECT	4.7uF	20%	100V
					(AEP/UK)
C52	1-126-964-11	ELECT	10uF	20%	50V
			(G, IT, E, EA, MX, MY, SP, CH, HK, AUS)		
C53	1-126-964-11	ELECT	10uF	20%	50V
C54	1-126-964-11	ELECT	10uF	20%	50V
C55	1-126-964-11	ELECT	10uF	20%	50V
C56	1-126-964-11	ELECT	10uF	20%	50V
C57	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C58	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C59	1-136-159-00	FILM	0.033uF	5%	50V
				(EXCEPT AE2, UK, G, IT)	
C59	1-136-160-00	FILM	0.039uF	5%	50V
					(AE2, UK, G, IT)
C60	1-136-159-00	FILM	0.033uF	5%	50V
				(EXCEPT AE2, UK, G, IT)	
C60	1-136-160-00	FILM	0.039uF	5%	50V
					(AE2, UK, G, IT)
C61	1-124-903-11	ELECT	1uF	20%	50V
C62	1-162-294-31	CERAMIC	0.001uF	10%	50V
C63	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C64	1-126-933-11	ELECT	100uF	20%	16V
					(AEP, UK)
C64	1-126-967-11	ELECT	47uF	20%	16V
			(G, IT, E, EA, MX, MY, SP, CH, HK, AUS)		
C65	1-162-306-11	CERAMIC	0.01uF	30%	16V
C66	1-126-111-11	ELECT	3.3uF	20%	50V
C67	1-126-933-11	ELECT	100uF	20%	10V
C68	1-162-306-11	CERAMIC	0.01uF	30%	16V
C101	1-162-286-31	CERAMIC	220PF	10%	50V
C102	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C112	1-162-306-11	CERAMIC	0.01uF	30%	16V
C113	1-162-306-11	CERAMIC	0.01uF	30%	16V
C124	1-126-964-11	ELECT	10uF	20%	50V
C125	1-136-161-00	FILM	0.047uF	5%	50V
C126	1-136-161-00	FILM	0.047uF	5%	50V
C127	1-136-169-00	FILM	0.22uF	5%	50V
C128	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C129	1-136-159-00	FILM	0.033uF	5%	50V
C130	1-162-306-11	CERAMIC	0.01uF	30%	16V
C131	1-136-169-00	FILM	0.22uF	5%	50V
C132	1-136-169-00	FILM	0.22uF	5%	50V
C133	1-126-964-11	ELECT	10uF	20%	50V
C134	1-126-964-11	ELECT	10uF	20%	50V
C135	1-136-169-00	FILM	0.22uF	5%	50V
C136	1-136-169-00	FILM	0.22uF	5%	50V
C137	1-162-306-11	CERAMIC	0.01uF	30%	16V
C138	1-136-159-00	FILM	0.033uF	5%	50V
C139	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C140	1-136-169-00	FILM	0.22uF	5%	50V

Ref. No.	Part No.	Description			Remark
C141	1-136-161-00	FILM	0.047uF	5%	50V
C142	1-161-494-00	CERAMIC	0.022uF		25V
C143	1-126-964-11	ELECT	10uF	20%	50V
C144	1-162-306-11	CERAMIC	0.01uF	30%	16V
C145	1-124-257-00	ELECT	2.2uF	20%	50V
C146	1-126-964-11	ELECT	10uF	20%	50V
C147	1-162-306-11	CERAMIC	0.01uF	30%	16V
C149	1-124-257-00	ELECT	2.2uF	20%	50V
C150	1-164-159-11	CERAMIC	0.1uF		50V
C151	1-162-286-31	CERAMIC	220PF	10%	50V
C152	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C153	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C154	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C160	1-164-159-11	CERAMIC	0.1uF		50V
C161	1-136-165-00	FILM	0.1uF	5%	50V
C162	1-136-165-00	FILM	0.1uF	5%	50V
C163	1-136-165-00	FILM	0.1uF	5%	50V
C164	1-136-165-00	FILM	0.1uF	5%	50V
C165	1-162-306-11	CERAMIC	0.01uF	30%	16V
C166	1-162-306-11	CERAMIC	0.01uF	30%	16V
C172	1-109-889-11	ELECT	1uF	20%	50V
C173	1-126-964-11	ELECT	10uF	20%	50V
C174	1-126-964-11	ELECT	10uF	20%	50V
C181	1-126-964-11	ELECT	10uF	20%	50V
C182	1-126-964-11	ELECT	10uF	20%	50V
C183	1-162-294-31	CERAMIC	0.001uF	10%	50V
C184	1-162-294-31	CERAMIC	0.001uF	10%	50V
C194	1-162-306-11	CERAMIC	0.01uF	30%	16V
C195	1-162-306-11	CERAMIC	0.01uF	30%	16V
C196	1-126-964-11	ELECT	10uF	20%	50V
C197	1-162-306-11	CERAMIC	0.01uF	30%	16V
C199	1-124-257-00	ELECT	2.2uF	20%	50V
C300	1-164-159-11	CERAMIC	0.1uF		50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C304	1-162-206-31	CERAMIC	20PF	5%	50V
C305	1-162-206-31	CERAMIC	20PF	5%	50V
C306	1-164-159-11	CERAMIC	0.1uF		50V
C307	1-124-927-11	ELECT	4.7uF	20%	100V
C312	1-162-306-11	CERAMIC	0.01uF	30%	16V
C314	1-126-926-11	ELECT	1000uF	20%	10V
C320	1-126-927-11	ELECT	2200uF	20%	10V
C380	1-126-964-11	ELECT	10uF	20%	50V
C381	1-162-294-31	CERAMIC	0.001uF	10%	50V
C383	1-162-290-31	CERAMIC	470PF	10%	50V
C398	1-162-306-11	CERAMIC	0.01uF	30%	16V
C402	1-130-479-00	MYLAR	0.0047uF	5%	50V
C403	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C404	1-164-159-11	CERAMIC	0.1uF		50V
C406	1-124-903-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description			Remark
C407	1-124-902-00	ELECT	0.47uF	20%	50V
C408	1-126-964-11	ELECT	10uF	20%	50V
C409	1-124-464-11	ELECT	0.22uF	20%	50V
C410	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C411	1-124-903-11	ELECT	1uF	20%	50V
C422	1-126-933-11	ELECT	100uF	20%	10V
C423	1-126-933-11	ELECT	100uF	20%	10V
C424	1-164-159-11	CERAMIC	0.1uF		50V
C425	1-164-159-11	CERAMIC	0.1uF		50V
C426	1-164-159-11	CERAMIC	0.1uF		50V
C427	1-126-952-11	ELECT	1000uF	20%	16V
C428	1-126-933-11	ELECT	100uF	20%	16V
C430	1-126-964-11	ELECT	10uF	20%	50V
C431	1-126-964-11	ELECT	10uF	20%	50V
C451	1-162-286-31	CERAMIC	220PF	10%	50V
C452	1-130-479-00	MYLAR	0.0047uF	5%	50V
C453	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C454	1-164-159-11	CERAMIC	0.1uF		50V
C456	1-124-903-11	ELECT	1uF	20%	50V
C457	1-124-902-00	ELECT	0.47uF	20%	50V
C458	1-126-964-11	ELECT	10uF	20%	50V
C459	1-124-464-11	ELECT	0.22uF	20%	50V
C460	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C461	1-124-903-11	ELECT	1uF	20%	50V
C801	1-136-165-00	FILM	0.1uF	5%	50V
C802	1-136-165-00	FILM	0.1uF	5%	50V
C803	1-126-974-11	ELECT	3300uF	20%	50V
C804	1-126-974-11	ELECT	3300uF	20%	50V
C805	1-124-122-11	ELECT	100uF	20%	50V
C806	1-124-122-11	ELECT	100uF	20%	50V
C808	1-126-947-11	ELECT	47uF	20%	35V
C809	1-126-936-11	ELECT	3300uF	20%	16V
C810	1-126-943-11	ELECT	2200uF	20%	25V
C811	1-126-952-11	ELECT	1000uF	20%	16V
C812	1-126-952-11	ELECT	1000uF	20%	16V
C813	1-164-159-11	CERAMIC	0.1uF		50V
C814	1-164-159-11	CERAMIC	0.1uF		50V
C815	1-126-933-11	ELECT	100uF	20%	10V
C824	1-126-933-11	ELECT	100uF	20%	10V
C825	1-126-933-11	ELECT	100uF	20%	10V
C826	1-126-916-11	ELECT	1000uF	20%	6.3V
C827	1-126-925-11	ELECT	470uF	20%	10V
C828	1-124-635-00	ELECT	220uF	20%	6.3V
C829	1-124-635-00	ELECT	220uF	20%	6.3V
C830	1-124-257-00	ELECT	2.2uF	20%	50V
C831	1-126-964-11	ELECT	10uF	20%	50V
C832	1-126-964-11	ELECT	10uF	20%	50V
C833	1-128-551-11	ELECT	22uF	20%	50V

MAIN

Ref. No.	Part No.	Description				Remark
C834	1-136-165-00	FILM	0.1uF	5%	50V	
C835	1-126-933-11	ELECT	100uF	20%	10V	
C838	1-126-933-11	ELECT	100uF	20%	10V	
C840	1-126-967-11	ELECT	47uF	20%	16V	
C2001	1-162-306-11	CERAMIC	0.01uF	30%	16V	(E3, EA, MY, SP, CH, HK)
C2002	1-162-306-11	CERAMIC	0.01uF	30%	16V	(E3, EA, MY, SP, CH, HK)
C2003	1-164-159-11	CERAMIC	0.1uF		50V	(E3, EA, MY, SP, CH, HK)
C2005	1-164-159-11	CERAMIC	0.1uF		50V	
C2006	1-164-159-11	CERAMIC	0.1uF		50V	
C2007	1-162-282-31	CERAMIC	100PF	10%	50V	(E3, EA, MY, SP, CH, HK)
C2008	1-162-282-31	CERAMIC	100PF	10%	50V	(E3, EA, MY, SP, CH, HK)
C2009	1-162-306-11	CERAMIC	0.01uF	30%	16V	(E3, EA, MY, SP, CH, HK)
C2020	1-164-159-11	CERAMIC	0.1uF		50V	(AEP, UK, G, IT)
C2021	1-164-159-11	CERAMIC	0.1uF		50V	(AEP, UK, G, IT)
C2501	1-162-294-31	CERAMIC	1000PF	10%	50V	
C2502	1-162-282-31	CERAMIC	100PF	10%	50V	
C2503	1-162-282-31	CERAMIC	100PF	10%	50V	
C2504	1-162-294-31	CERAMIC	1000PF	10%	50V	
C2506	1-162-282-31	CERAMIC	100PF	10%	50V	
C2508	1-162-294-31	CERAMIC	1000PF	10%	50V	
C2510	1-162-294-31	CERAMIC	1000PF	10%	50V	
C2511	1-162-294-31	CERAMIC	1000PF	10%	50V	
C2512	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C2513	1-162-294-31	CERAMIC	1000PF	10%	50V	
C9001	1-162-306-11	CERAMIC	0.01uF	30%	16V	(AE2, UK, G, IT)
C9002	1-162-306-11	CERAMIC	0.01uF	30%	16V	(AE2, UK, G, IT)
		< FILTER >				
CF1	1-567-389-11	FILTER, CERAMIC				
CF2	1-567-389-11	FILTER, CERAMIC (AE2, UK, G, IT)				
CF3	1-567-389-11	FILTER, CERAMIC				
		< CONNECTOR >				
* CN103	1-568-954-11	PIN, CONNECTOR 5P				
CN104	1-691-765-11	PLUG (MICRO CONNECTOR) 3P				
* CN105	1-568-836-11	SOCKET, CONNECTOR 17P				
CN111	1-568-802-11	SOCKET, CONNECTOR 19P				
* CN121	1-568-934-11	PIN, CONNECTOR 7P				
CN122	1-691-771-31	PLUG (MICRO CONNECTOR) 9P				
CN401	1-568-838-11	SOCKET, CONNECTOR 21P				

Ref. No.	Part No.	Description	Remark
* CN402	1-568-830-11	SOCKET, CONNECTOR 11P	
* CN404	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
CN802	1-691-772-11	PLUG (MICRO CONNECTOR) 10P	
CN821	1-691-767-11	PLUG (MICRO CONNECTOR) 5P	
CN822	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
CN921	1-691-771-11	PLUG (MICRO CONNECTOR) 9P	
CN922	1-691-770-11	PLUG (MICRO CONNECTOR) 8P	
		< VARIABLE CAPACITOR >	
CV1	1-141-227-00	CAP, TRIMMER 20PF (E3, EA, MY, SP, CH, HK)	
CV2	1-141-227-00	CAP, TRIMMER 20PF (E3, EA, MY, SP, CH, HK)	
		< DIODE >	
D1	8-719-976-30	DIODE KV1560N (E3, EA, MY, SP, CH, HK)	
D21	8-719-933-33	DIODE HZS6A1L	
D41	8-719-987-63	DIODE 1N4148M	
D101	8-719-010-33	DIODE UZ-4.7BSB	
D102	8-719-987-63	DIODE 1N4148M	
D103	8-719-987-63	DIODE 1N4148M	
D104	8-719-987-63	DIODE 1N4148M	
D105	8-719-987-63	DIODE 1N4148M	
D106	8-719-210-21	DIODE 11EQS04	
D107	8-719-987-63	DIODE 1N4148M	
D301	8-719-024-99	DIODE 11ES2-NTA2B	
D302	8-719-987-63	DIODE 1N4148M	
D304	8-719-987-63	DIODE 1N4148M	
D306	8-719-987-63	DIODE 1N4148M	
D349	8-719-987-63	DIODE 1N4148M	
D401	8-719-987-63	DIODE 1N4148M	
D801	8-719-987-63	DIODE 1N4148M	
D802	8-719-987-63	DIODE 1N4148M	
D803	8-719-025-03	DIODE RBA-402-SL (AEP, UK, G, IT)	
D803	8-719-302-37	DIODE RBV-602 (E, EA, MX, MY, SP, CH, HK, AUS)	
D804	8-719-024-99	DIODE 11ES2-NTA2B	
D805	8-719-024-99	DIODE 11ES2-NTA2B	
D806	8-719-934-18	DIODE HZS27-2L	
D807	8-719-024-99	DIODE 11ES2-NTA2B	
D808	8-719-024-99	DIODE 11ES2-NTA2B	
D809	8-719-987-63	DIODE 1N4148M	
D810	8-719-987-63	DIODE 1N4148M	
D811	8-719-024-99	DIODE 11ES2-NTA2B	
D812	8-719-210-21	DIODE 11EQS04	
D813	8-719-024-99	DIODE 11ES2-NTA2B	
D814	8-719-210-21	DIODE 11EQS04	
D815	8-719-987-63	DIODE 1N4148M	
D819	8-719-987-63	DIODE 1N4148M	
D823	8-719-024-99	DIODE 11ES2-NTA2B	
D824	8-719-024-99	DIODE 11ES2-NTA2B	

Ref. No.	Part No.	Description	Remark
D825	8-719-024-99	DIODE 11ES2-NTA2B	
		< FRONTEND >	
FE1	1-465-673-11	FRONT END (2 BAND) (AE1)	
FE1	1-693-217-11	FRONT END (4 GANG) (AE2, UK, G, IT)	
FE1	1-693-090-51	FRONTEND (FM) (2 GANG)	(E, EA, MX, MY, SP, CH, HK)
FE1	1-693-090-31	FRONT END (FM) (2 GANG) (AUS)	
FE2	1-233-281-11	ENCAPSULATED COMPONENT (AEP, UK)	
FE2	1-239-260-11	ENCAPSULATED COMPONENT (G, IT, E2, MX, AUS)	
FE2	1-239-262-11	ENCAPSULATED COMPONENT	(E3, EA, MY, SP, CH, HK)
		< IC >	
IC1	8-759-200-60	IC TA7060AP (AE2, UK, G, IT)	
IC2	8-759-200-60	IC TA7060AP (AE2, UK, G, IT)	
IC21	8-759-288-54	IC LC72130	
IC41	8-759-176-03	IC LA1835	
IC101	8-759-345-94	IC TMP87CP64F-6281	
IC102	8-759-000-48	IC MC14052BCP	
IC104	8-759-140-53	IC uPD4053BC (E, EA, MX, MY, SP, CH, HK, AUS)	
IC105	8-759-822-09	IC LB1641	
IC107	8-759-634-51	IC M5218AP	
IC108	8-759-291-98	IC M62423FP	
IC109	8-759-281-42	IC TC9210P	
IC301	8-759-916-14	IC SN74HC04AN	
IC401	8-759-289-38	IC HA12195NT	
IC402	8-759-822-09	IC LB1641	
IC801	8-759-111-68	IC uPC1237HA	
IC802	8-759-231-53	IC TA7805S	
IC803	8-759-231-58	IC TA7812S	
IC804	8-759-288-53	IC LA5617	
IC805	8-759-165-80	IC PST600C-T	
IC806	8-759-604-86	IC M5F7807	
		< IFT >	
IFT41	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)	
		< JACK >	
* J101	1-569-130-11	JACK, PIN 2P (VVIDEO IN)	
		< COIL >	
L1	1-410-521-11	INDUCTOR 100uH (E3, EA, MY, SP, CH, HK)	
L2	1-408-397-00	INDUCTOR 1uH (AE2, UK, G, IT)	
L41	1-407-500-00	INDUCTOR 4.7mH	
L401	1-410-482-31	INDUCTOR 100uH	
L2501	1-410-521-11	INDUCTOR 100uH	
L2502	1-410-521-11	INDUCTOR 100uH	
L2503	1-410-521-11	INDUCTOR 100uH	
		< FILTER >	
LPF41	1-239-845-11	FILTER, LOW PASS	
LPF42	1-239-845-11	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY	(AE1, E, EA, MX, MY, SP, CH, HK, AUS)
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY	(AE1, E, EA, MX, MY, SP, CH, HK, AUS)
Q3	8-729-422-57	TRANSISTOR UN4111	
Q8	8-729-231-20	TRANSISTOR 2SK161-YGR	(E3, EA, MY, SP, CH, HK)
Q9	8-729-117-59	TRANSISTOR 2SA1175	(AEP, UK, E3, EA, MY, SP, CH, HK)
Q10	8-729-119-76	TRANSISTOR 2SA1175-HFE	(E3, EA, MY, SP, CH, HK)
Q11	8-729-900-80	TRANSISTOR DTC114ES (AEP, UK)	
Q12	8-729-900-80	TRANSISTOR DTC114ES	(AEP, UK, E3, EA, MY, SP, HK)
Q13	8-729-900-80	TRANSISTOR DTC114ES	(AEP, UK, E3, EA, MY, SP, HK)
Q14	8-729-900-80	TRANSISTOR DTC114ES	(AEP, UK, E3, EA, MY, SP, HK)
Q105	8-729-178-59	TRANSISTOR 2SC2785	
Q107	8-729-900-80	TRANSISTOR DTC114ES	
Q108	8-729-900-80	TRANSISTOR DTC114ES	
Q110	8-729-900-80	TRANSISTOR DTC114ES	(E, EA, MX, MY, SP, CH, HK, AUS)
Q170	8-729-422-57	TRANSISTOR UN4111	
Q171	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q172	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q173	8-729-178-59	TRANSISTOR 2SC2785	
Q174	8-729-178-59	TRANSISTOR 2SC2785	
Q303	8-729-178-59	TRANSISTOR 2SC2785	
Q401	8-729-178-59	TRANSISTOR 2SC2785	
Q403	8-729-900-65	TRANSISTOR DTA144ES	
Q404	8-729-178-59	TRANSISTOR 2SC2785	
Q405	8-729-116-81	TRANSISTOR 2SD1616	
Q406	8-729-116-81	TRANSISTOR 2SD1616	
Q407	8-729-116-81	TRANSISTOR 2SD1616	
Q408	8-729-422-57	TRANSISTOR UN4111	
Q409	8-729-900-80	TRANSISTOR DTC114ES	
Q410	8-729-117-59	TRANSISTOR 2SA1175	
Q411	8-729-900-80	TRANSISTOR DTC114ES	
Q412	8-729-900-65	TRANSISTOR DTA144ES	
Q413	8-729-900-65	TRANSISTOR DTA144ES	

MAIN

Ref. No.	Part No.	Description				Remark
Q414	8-729-900-65	TRANSISTOR	DTA144ES			
Q451	8-729-178-59	TRANSISTOR	2SC2785			
Q801	8-729-900-63	TRANSISTOR	DTA124ES			
Q802	8-729-900-89	TRANSISTOR	DTC144ES			
Q807	8-729-900-89	TRANSISTOR	DTC144ES			
Q808	8-729-118-01	TRANSISTOR	2SB1116			
Q809	8-729-900-89	TRANSISTOR	DTC144ES			
Q810	8-729-118-01	TRANSISTOR	2SB1116			
Q811	8-729-118-01	TRANSISTOR	2SB1116			
Q812	8-729-422-57	TRANSISTOR	UN4111			
Q813	8-729-116-81	TRANSISTOR	2SD1616			
Q814	8-729-900-80	TRANSISTOR	DTC114ES			
		< RESISTOR >				
R4	1-249-411-11	CARBON	330	5%	1/4W	
R5	1-249-411-11	CARBON	330	5%	1/4W	
R6	1-249-409-11	CARBON	220	5%	1/4W	
R7	1-249-411-11	CARBON	330	5%	1/4W	
R8	1-249-432-11	CARBON	18K	5%	1/4W	
R9	1-249-434-11	CARBON	27K	5%	1/4W	
R10	1-249-411-11	CARBON	330	5%	1/4W	
R11	1-249-411-11	CARBON	330	5%	1/4W	(AE2, UK, G, IT)
R12	1-249-432-11	CARBON	18K	5%	1/4W	(AE2, UK, G, IT)
R13	1-249-434-11	CARBON	27K	5%	1/4W	(AE2, UK, G, IT)
R14	1-249-411-11	CARBON	330	5%	1/4W	(AE2, UK, G, IT)
R15	1-249-414-11	CARBON	560	5%	1/4W	(AE1, E, EA, MX, MY, SP, CH, HK, AUS)
R17	1-249-399-11	CARBON	33	5%	1/4W	
R18	1-249-429-11	CARBON	10K	5%	1/4W	(AEP, UK, E3, EA, MY, SP, CH, HK)
R19	1-249-429-11	CARBON	10K	5%	1/4W	(AEP, UK, E3, EA, MY, SP, CH, HK)
R20	1-247-903-00	CARBON	1M	5%	1/4W	(E3, EA, MY, SP, CH, HK)
R21	1-249-417-11	CARBON	1K	5%	1/4W	
R22	1-249-417-11	CARBON	1K	5%	1/4W	
R23	1-249-417-11	CARBON	1K	5%	1/4W	
R24	1-249-417-11	CARBON	1K	5%	1/4W	
R25	1-249-417-11	CARBON	1K	5%	1/4W	
R26	1-249-435-11	CARBON	33K	5%	1/4W	
R27	1-249-429-11	CARBON	10K	5%	1/4W	
R28	1-249-417-11	CARBON	1K	5%	1/4W	
R29	1-249-423-11	CARBON	3.3K	5%	1/4W	
R30	1-249-407-11	CARBON	150	5%	1/4W	
R31	1-247-807-31	CARBON	100	5%	1/4W	
R32	1-249-421-11	CARBON	2.2K	5%	1/4W	
R33	1-249-425-11	CARBON	4.7K	5%	1/4W	
R34	1-249-425-11	CARBON	4.7K	5%	1/4W	
R35	1-249-425-11	CARBON	4.7K	5%	1/4W	
R36	1-247-807-31	CARBON	100	5%	1/4W	
R37	1-249-429-11	CARBON	10K	5%	1/4W	
R38	1-249-437-11	CARBON	47K	5%	1/4W	
R41	1-249-437-11	CARBON	47K	5%	1/4W	
R42	1-249-423-11	CARBON	3.3K	5%	1/4W	
R43	1-249-442-11	CARBON	510	5%	1/4W	
R44	1-247-807-31	CARBON	100	5%	1/4W	
R45	1-247-842-11	CARBON	3K	5%	1/4W	
R46	1-249-429-11	CARBON	10K	5%	1/4W	
R47	1-249-441-11	CARBON	100K	5%	1/4W	
R48	1-249-423-11	CARBON	3.3K	5%	1/4W	
R49	1-249-423-11	CARBON	3.3K	5%	1/4W	
R50	1-249-426-11	CARBON	5.6K	5%	1/4W	
R51	1-249-426-11	CARBON	5.6K	5%	1/4W	
R52	1-249-435-11	CARBON	33K	5%	1/4W	
R53	1-249-429-11	CARBON	10K	5%	1/4W	
R54	1-249-395-11	CARBON	15	5%	1/4W	(E3, EA, MY, SP, CH, HK)
R55	1-249-399-11	CARBON	33	5%	1/4W	
R56	1-249-393-11	CARBON	10	5%	1/4W	
R91	1-249-425-11	CARBON	4.7K	5%	1/4W	(E3, EA, MY, SP, CH, HK)
R92	1-249-429-11	CARBON	10K	5%	1/4W	(AEP, UK, E3, EA, MY, SP, CH, HK)
R93	1-249-429-11	CARBON	10K	5%	1/4W	(E3, EA, MY, SP, CH, HK)
R94	1-249-429-11	CARBON	10K	5%	1/4W	(E3, EA, MY, SP, CH, HK)
R101	1-249-417-11	CARBON	1K	5%	1/4W	
R102	1-249-437-11	CARBON	47K	5%	1/4W	
R111	1-249-429-11	CARBON	10K	5%	1/4W	
R112	1-249-429-11	CARBON	10K	5%	1/4W	
R114	1-249-429-11	CARBON	10K	5%	1/4W	(E, EA, MX, MY, SP, CH, HK, AUS)
R128	1-249-441-11	CARBON	100K	5%	1/4W	
R129	1-249-441-11	CARBON	100K	5%	1/4W	
R130	1-249-441-11	CARBON	100K	5%	1/4W	
R131	1-247-903-00	CARBON	1M	5%	1/4W	
R133	1-249-417-11	CARBON	1K	5%	1/4W	
R134	1-247-895-00	CARBON	470K	5%	1/4W	
R135	1-249-441-11	CARBON	100K	5%	1/4W	
R144	1-249-415-11	CARBON	680	5%	1/4W	
R145	1-249-417-11	CARBON	1K	5%	1/4W	
R148	1-249-431-11	CARBON	15K	5%	1/4W	
R149	1-249-441-11	CARBON	100K	5%	1/4W	
R150	1-249-421-11	CARBON	2.2K	5%	1/4W	

Ref. No.	Part No.	Description			Remark
R151	1-249-417-11	CARBON	1K	5%	1/4W
R152	1-249-437-11	CARBON	47K	5%	1/4W
R154	1-249-441-11	CARBON	100K	5%	1/4W
R155	1-249-441-11	CARBON	100K	5%	1/4W
R156	1-249-429-11	CARBON	10K	5%	1/4W
R157	1-249-429-11	CARBON	10K	5%	1/4W
R158	1-249-433-11	CARBON	22K	5%	1/4W
R159	1-249-433-11	CARBON	22K	5%	1/4W
R160	1-249-429-11	CARBON	10K	5%	1/4W
R161	1-249-429-11	CARBON	10K	5%	1/4W
R162	1-247-895-00	CARBON	470K	5%	1/4W
R163	1-247-895-00	CARBON	470K	5%	1/4W
R164	1-249-419-11	CARBON	1.5K	5%	1/4W
R165	1-249-419-11	CARBON	1.5K	5%	1/4W
R168	1-249-425-11	CARBON	4.7K	5%	1/4W
R169	1-249-425-11	CARBON	4.7K	5%	1/4W
R170	1-249-441-11	CARBON	100K	5%	1/4W
R173	1-249-429-11	CARBON	10K	5%	1/4W
R176	1-249-429-11	CARBON	10K	5%	1/4W
R178	1-249-423-11	CARBON	3.3K	5%	1/4W
R180	1-249-441-11	CARBON	100K	5%	1/4W
R183	1-249-413-11	CARBON	470	5%	1/4W
R184	1-247-903-00	CARBON	1M	5%	1/4W
R185	1-247-903-00	CARBON	1M	5%	1/4W
R186	1-247-887-00	CARBON	220K	5%	1/4W
R187	1-249-429-11	CARBON	10K	5%	1/4W
R188	1-249-423-11	CARBON	3.3K	5%	1/4W
R194	1-249-415-11	CARBON	680	5%	1/4W
R195	1-249-417-11	CARBON	1K	5%	1/4W
R198	1-249-431-11	CARBON	15K	5%	1/4W
R199	1-249-441-11	CARBON	100K	5%	1/4W
R232	1-247-807-31	CARBON	100	5%	1/4W
R233	1-247-807-31	CARBON	100	5%	1/4W
R234	1-247-807-31	CARBON	100	5%	1/4W
R235	1-247-807-31	CARBON	100	5%	1/4W
R236	1-247-807-31	CARBON	100	5%	1/4W
R237	1-247-807-31	CARBON	100	5%	1/4W
R238	1-249-433-11	CARBON	22K	5%	1/4W
R300	1-249-429-11	CARBON	10K	5%	1/4W
R301	1-249-429-11	CARBON	10K	5%	1/4W
R304	1-249-437-11	CARBON	47K	5%	1/4W
R306	1-249-429-11	CARBON	10K	5%	1/4W
R307	1-249-429-11	CARBON	10K	5%	1/4W
R309	1-247-807-31	CARBON	100	5%	1/4W
R310	1-247-807-31	CARBON	100	5%	1/4W
R311	1-247-807-31	CARBON	100	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R313	1-247-807-31	CARBON	100	5%	1/4W
R314	1-247-807-31	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description			Remark
R315	1-247-807-31	CARBON	100	5%	1/4W
R316	1-249-437-11	CARBON	47K	5%	1/4W
R317	1-249-433-11	CARBON	22K	5%	1/4W
R318	1-249-425-11	CARBON	4.7K	5%	1/4W
R319	1-249-425-11	CARBON	4.7K	5%	1/4W
R320	1-249-425-11	CARBON	4.7K	5%	1/4W
R325	1-249-429-11	CARBON	10K	5%	1/4W
R333	1-249-423-11	CARBON	3.3K	5%	1/4W
R334	1-249-429-11	CARBON	10K	5%	1/4W
R335	1-249-429-11	CARBON	10K	5%	1/4W
R338	1-247-807-31	CARBON	100	5%	1/4W
R339	1-247-807-31	CARBON	100	5%	1/4W
R340	1-247-807-31	CARBON	100	5%	1/4W
R341	1-247-807-31	CARBON	100	5%	1/4W
R342	1-247-807-31	CARBON	100	5%	1/4W
R343	1-247-807-31	CARBON	100	5%	1/4W
R344	1-247-807-31	CARBON	100	5%	1/4W
R345	1-247-807-31	CARBON	100	5%	1/4W
R346	1-247-807-31	CARBON	100	5%	1/4W
R347	1-247-807-31	CARBON	100	5%	1/4W
R348	1-249-413-11	CARBON	470	5%	1/4W
R349	1-249-413-11	CARBON	470	5%	1/4W
R364	1-249-425-11	CARBON	4.7K	5%	1/4W
R373	1-249-423-11	CARBON	3.3K	5%	1/4W (E3, EA, MY, SP, CH, HK)
R373	1-249-429-11	CARBON	10K	5%	1/4W (G, E2, MX, AUS)
R373	1-249-431-11	CARBON	15K	5%	1/4W (IT)
R373	1-249-433-11	CARBON	22K	5%	1/4W (AEP, UK)
R374	1-249-429-11	CARBON	10K	5%	1/4W (AEP, UK, G, IT)
R374	1-249-431-11	CARBON	15K	5%	1/4W (E3, EA, MY, SP, CH, HK, AUS)
R374	1-249-433-11	CARBON	22K	5%	1/4W (E2, MX)
R375	1-249-429-11	CARBON	10K	5%	1/4W
R376	1-249-431-11	CARBON	15K	5%	1/4W
R378	1-249-429-11	CARBON	10K	5%	1/4W
R379	1-249-429-11	CARBON	10K	5%	1/4W
R380	1-249-429-11	CARBON	10K	5%	1/4W
R401	1-249-430-11	CARBON	12K	5%	1/4W
R402	1-249-431-11	CARBON	15K	5%	1/4W
R403	1-249-427-11	CARBON	6.8K	5%	1/4W
R404	1-249-425-11	CARBON	4.7K	5%	1/4W
R405	1-249-418-11	CARBON	1.2K	5%	1/4W
R406	1-249-417-11	CARBON	1K	5%	1/4W
R407	1-249-437-11	CARBON	47K	5%	1/4W
R408	1-249-417-11	CARBON	1K	5%	1/4W
R409	1-249-433-11	CARBON	22K	5%	1/4W
R420	1-249-432-11	CARBON	18K	5%	1/4W

MAIN MAIN AMP

Ref. No.	Part No.	Description			Remark
R421	1-249-429-11	CARBON	10K	5%	1/4W
R422	1-249-429-11	CARBON	10K	5%	1/4W
R423	1-249-429-11	CARBON	10K	5%	1/4W
R424	1-249-429-11	CARBON	10K	5%	1/4W
R425	1-249-429-11	CARBON	10K	5%	1/4W
R426	1-249-429-11	CARBON	10K	5%	1/4W
R427	1-249-429-11	CARBON	10K	5%	1/4W
R428	1-249-429-11	CARBON	10K	5%	1/4W
R429	1-249-429-11	CARBON	10K	5%	1/4W
R430	1-247-866-11	CARBON	30K	5%	1/4W
R431	1-247-882-11	CARBON	130K	5%	1/4W
R432	1-249-429-11	CARBON	10K	5%	1/4W
R433	1-249-425-11	CARBON	4.7K	5%	1/4W
R434	1-249-425-11	CARBON	4.7K	5%	1/4W
R435	1-249-425-11	CARBON	4.7K	5%	1/4W
R436	1-249-417-11	CARBON	1K	5%	1/4W
R437	1-249-436-11	CARBON	39K	5%	1/4W
R438	1-249-436-11	CARBON	39K	5%	1/4W
R439	1-249-437-11	CARBON	47K	5%	1/4W
R440	1-249-437-11	CARBON	47K	5%	1/4W
R441	1-249-381-11	CARBON	1	5%	1/4W
R442	1-249-413-11	CARBON	470	5%	1/4W
R443	1-249-381-11	CARBON	1	5%	1/4W
R444	1-249-413-11	CARBON	470	5%	1/4W
R445	1-249-381-11	CARBON	1	5%	1/4W
R446	1-249-413-11	CARBON	470	5%	1/4W
R447	1-249-419-11	CARBON	1.5K	5%	1/4W
R448	1-249-433-11	CARBON	22K	5%	1/4W
R449	1-249-435-11	CARBON	33K	5%	1/4W
R450	1-249-433-11	CARBON	22K	5%	1/4W
R451	1-249-430-11	CARBON	12K	5%	1/4W
R452	1-249-431-11	CARBON	15K	5%	1/4W
R453	1-249-427-11	CARBON	6.8K	5%	1/4W
R454	1-249-425-11	CARBON	4.7K	5%	1/4W
R455	1-249-418-11	CARBON	1.2K	5%	1/4W
R456	1-249-417-11	CARBON	1K	5%	1/4W
R457	1-249-437-11	CARBON	47K	5%	1/4W
R458	1-249-417-11	CARBON	1K	5%	1/4W
R459	1-249-433-11	CARBON	22K	5%	1/4W
R460	1-249-425-11	CARBON	4.7K	5%	1/4W
R461	1-249-425-11	CARBON	4.7K	5%	1/4W
R462	1-249-425-11	CARBON	4.7K	5%	1/4W
R470	1-249-433-11	CARBON	22K	5%	1/4W
R480	1-247-864-11	CARBON	24K	5%	1/4W
⚠R801	1-219-122-91	FUSIBLE	0.33	5%	1/4W F
⚠R802	1-219-122-91	FUSIBLE	0.33	5%	1/4W F
R803	1-249-429-11	CARBON	10K	5%	1/4W
R804	1-249-429-11	CARBON	10K	5%	1/4W
⚠R805	1-219-122-91	FUSIBLE	0.33	5%	1/4W F

Ref. No.	Part No.	Description			Remark
R806	1-249-417-11	CARBON	1K	5%	1/4W
R808	1-249-417-11	CARBON	1K	5%	1/4W
⚠R814	1-219-122-91	FUSIBLE	0.33	5%	1/4W F
R820	1-249-421-11	CARBON	2.2K	5%	1/4W
R821	1-249-409-11	CARBON	220	5%	1/4W
R822	1-249-429-11	CARBON	10K	5%	1/4W
R823	1-249-421-11	CARBON	2.2K	5%	1/4W
R824	1-249-429-11	CARBON	10K	5%	1/4W
R825	1-249-441-11	CARBON	100K	5%	1/4W
R826	1-249-397-11	CARBON	22	5%	1/4W
R827	1-249-435-11	CARBON	33K	5%	1/4W
R828	1-249-425-11	CARBON	4.7K	5%	1/4W
R829	1-249-425-11	CARBON	4.7K	5%	1/4W
R830	1-249-409-11	CARBON	220	5%	1/4W
R835	1-249-409-11	CARBON	220	5%	1/4W
R836	1-249-397-11	CARBON	22	5%	1/4W
R838	1-249-429-11	CARBON	10K	5%	1/4W

< VARIABLE RESISTOR >

RV41	1-241-765-11	RES, ADJ, CARBON 22K
RV42	1-241-630-11	RES, ADJ, CARBON 10K
RV401	1-241-630-11	RES, ADJ, CARBON 10K
RV451	1-241-630-11	RES, ADJ, CARBON 10K

< TRANSFORMER >

T1	1-409-505-11	COIL (ANT. SW3) (E3, EA, MY, SP, CH, HK)
T2	1-402-960-11	COIL (OSC SW3) (E3, EA, MY, SP, CH, HK)

< TERMINAL >

TM1	1-537-238-21	TERMINAL BOARD (ANTENNA) (E, EA, MX, MY, SP, CH, HK, AUS)
TM1	1-537-488-11	TERMINAL BOARD (ANTENNA) (AEP, UK, G, IT)

< VIBRATOR >

X21	1-578-785-11	VIBRATOR, CRYSTAL (4.5MHz)
X41	1-760-220-11	FILTER, CERAMIC
X42	1-527-981-00	FILTER, CERAMIC
X43	1-577-075-11	OSCILLATOR, CERAMIC (19kHZ)
X301	1-579-125-11	VIBRATOR, CERAMIC (8MHz)
X302	1-567-098-41	VIBRATOR, CRYSTAL 32.768kHz)

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*	A-4378-075-A	MAIN AMP BOARD, COMPLETE (AE1)
*	A-4378-082-A	MAIN AMP BOARD, COMPLETE (AE2, UK, G, IT)
*	A-4378-062-A	MAIN AMP BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)

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*	4-942-204-01	PLATE, GROUND

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

MAIN AMP | PANEL | AMS ENCODER

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C1201	1-124-927-11	ELECT	4.7uF	20%	100V
C1202	1-162-292-31	CERAMIC	680PF	10%	50V
C1203	1-162-290-31	CERAMIC	470PF	10%	50V
C1204	1-126-967-11	ELECT	47uF	20%	50V
C1205	1-126-967-11	ELECT	47uF	20%	50V
C1206	1-124-122-11	ELECT	100uF	20%	50V
C1208	1-128-551-11	ELECT	22uF	20%	50V
C1210	1-136-495-11	FILM	0.068uF	5%	50V
C1211	1-136-495-11	FILM	0.068uF	5%	50V
C1220	1-126-923-11	ELECT	220uF	20%	10V
C1225	1-162-284-31	CERAMIC	150PF	10%	50V
C1226	1-162-284-31	CERAMIC	150PF	10%	50V (AE2, UK, G, IT)
C1251	1-124-927-11	ELECT	4.7uF	20%	100V
C1252	1-162-292-31	CERAMIC	680PF	10%	50V
C1253	1-162-290-31	CERAMIC	470PF	10%	50V
C1254	1-126-967-11	ELECT	47uF	20%	50V
C1255	1-126-967-11	ELECT	47uF	20%	50V
C1256	1-124-122-11	ELECT	100uF	20%	50V
C1260	1-136-495-11	FILM	0.068uF	5%	50V
C1261	1-136-495-11	FILM	0.068uF	5%	50V
		< CONNECTOR >			
CN1201	1-691-771-11	PLUG (MICRO CONNECTOR) 9P			
CN1203	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
		< DIODE >			
D1201	8-719-987-63	DIODE 1N4148M			
D1202	8-719-987-63	DIODE 1N4148M			
D1203	8-719-987-63	DIODE 1N4148M			
D1251	8-719-987-63	DIODE 1N4148M			
		< IC >			
IC1201	8-749-900-96	IC STK-4142MK2 (AEP, UK, G, IT)			
IC1201	8-749-920-10	IC STK4172MK2 (E, EA, MX, MY, SP, CH, HK, AUS)			
		< TRANSISTOR >			
Q1201	8-729-116-81	TRANSISTOR NYD3T-TP (AEP, UK, G, IT)			
Q1201	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA (E, EA, MX, MY, SP, CH, HK, AUS)			
Q1251	8-729-116-81	TRANSISTOR NYD3T-TP (AEP, UK, G, IT)			
Q1251	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA (E, EA, MX, MY, SP, CH, HK, AUS)			
		< RESISTOR >			
R1201	1-249-417-11	CARBON	1K	5%	1/4W
R1202	1-249-437-11	CARBON	47K	5%	1/4W
R1203	1-249-417-11	CARBON	1K	5%	1/4W
R1204	1-249-437-11	CARBON	47K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R1205	1-249-425-11	CARBON	4.7K	5%	1/4W
R1206	1-249-425-11	CARBON	4.7K	5%	1/4W
R1207	1-249-425-11	CARBON	4.7K	5%	1/4W
R1208	1-249-425-11	CARBON	4.7K	5%	1/4W
⚠R1209	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R1210	1-208-602-11	WIREWOUND	0.22	10%	2W F
R1211	1-249-417-11	CARBON	1K	5%	1/4W
R1212	1-249-431-11	CARBON	15K	5%	1/4W
R1213	1-249-441-11	CARBON	100K	5%	1/4W
R1214	1-249-421-11	CARBON	2.2K	5%	1/4W
R1215	1-249-421-11	CARBON	2.2K	5%	1/4W
R1216	1-249-421-11	CARBON	2.2K	5%	1/4W
R1217	1-249-421-11	CARBON	2.2K	5%	1/4W
R1218	1-249-397-11	CARBON	22	5%	1/4W
R1219	1-249-397-11	CARBON	22	5%	1/4W
R1227	1-249-429-11	CARBON	10K	5%	1/4W
R1228	1-249-441-11	CARBON	100K	5%	1/4W
R1230	1-249-429-11	CARBON	10K	5%	1/4W
R1242	1-249-429-11	CARBON	10K	5%	1/4W
⚠R1244	1-217-637-00	FUSIBLE	1	5%	1/4W F
R1251	1-249-417-11	CARBON	1K	5%	1/4W
R1252	1-249-437-11	CARBON	47K	5%	1/4W
R1253	1-249-417-11	CARBON	1K	5%	1/4W
R1254	1-249-437-11	CARBON	47K	5%	1/4W
R1255	1-249-425-11	CARBON	4.7K	5%	1/4W
R1256	1-249-425-11	CARBON	4.7K	5%	1/4W
R1257	1-249-425-11	CARBON	4.7K	5%	1/4W
R1258	1-249-425-11	CARBON	4.7K	5%	1/4W
⚠R1259	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R1260	1-208-602-11	WIREWOUND	0.22	10%	2W F
R1261	1-249-417-11	CARBON	1K	5%	1/4W
R1262	1-249-431-11	CARBON	15K	5%	1/4W
R1263	1-249-441-11	CARBON	100K	5%	1/4W
R1268	1-249-397-11	CARBON	22	5%	1/4W
R1269	1-249-397-11	CARBON	22	5%	1/4W

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* A-4378-078-A PANEL BOARD, COMPLETE (AEP, UK, G, IT)
* A-4378-068-A PANEL BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)

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AMS ENCODER BOARD

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< CAPACITOR >

C501	1-126-967-11	ELECT	47uF	20%	16V
C502	1-162-282-31	CERAMIC	100PF	10%	50V
C503	1-126-154-11	ELECT	47uF	20%	6.3V
C504	1-162-294-31	CERAMIC	0.001uF	10%	50V

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

PANEL AMS ENCODER

Ref. No.	Part No.	Description			Remark
C505	1-162-294-31	CERAMIC	0.001uF	10%	50V
C506	1-162-294-31	CERAMIC	0.001uF	10%	50V
C507	1-162-294-31	CERAMIC	0.001uF	10%	50V
C508	1-162-294-31	CERAMIC	0.001uF	10%	50V
C509	1-164-159-11	CERAMIC	0.1uF		50V
C510	1-164-159-11	CERAMIC	0.1uF		50V
C511	1-162-286-31	CERAMIC	220PF	10%	50V
C512	1-162-286-31	CERAMIC	220PF	10%	50V
C513	1-162-286-31	CERAMIC	220PF	10%	50V
C514	1-162-286-31	CERAMIC	220PF	10%	50V
C515	1-162-286-31	CERAMIC	220PF	10%	50V
C516	1-162-286-31	CERAMIC	220PF	10%	50V
C517	1-162-286-31	CERAMIC	220PF	10%	50V
C518	1-162-286-31	CERAMIC	220PF	10%	50V
C519	1-162-286-31	CERAMIC	220PF	10%	50V
C520	1-162-286-31	CERAMIC	220PF	10%	50V
C521	1-162-286-31	CERAMIC	220PF	10%	50V
C522	1-162-286-31	CERAMIC	220PF	10%	50V
C523	1-162-286-31	CERAMIC	220PF	10%	50V
C524	1-162-286-31	CERAMIC	220PF	10%	50V
C525	1-162-286-31	CERAMIC	220PF	10%	50V
C526	1-162-286-31	CERAMIC	220PF	10%	50V
C548	1-164-159-11	CERAMIC	0.1uF		50V
C549	1-124-257-00	ELECT	2.2uF	20%	50V
C552	1-126-160-11	ELECT	1uF	20%	50V
C600	1-162-306-11	CERAMIC	0.01uF	30%	16V
C601	1-162-306-11	CERAMIC	0.01uF	30%	16V
C602	1-162-306-11	CERAMIC	0.01uF	30%	16V
C603	1-124-257-00	ELECT	2.2uF	20%	50V
C604	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C605	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C606	1-162-306-11	CERAMIC	0.01uF	30%	16V
C607	1-124-257-00	ELECT	2.2uF	20%	50V
C608	1-162-294-31	CERAMIC	0.001uF	10%	50V
C609	1-162-294-31	CERAMIC	0.001uF	10%	50V
C610	1-162-306-11	CERAMIC	0.01uF	30%	16V
C611	1-124-257-00	ELECT	2.2uF	20%	50V
C612	1-162-286-31	CERAMIC	220PF	10%	50V
C613	1-162-286-31	CERAMIC	220PF	10%	50V
C614	1-162-306-11	CERAMIC	0.01uF	30%	16V
C615	1-124-257-00	ELECT	2.2uF	20%	50V
C5001	1-164-159-11	CERAMIC	0.1uF		50V
C5002	1-164-159-11	CERAMIC	0.1uF		50V
C5003	1-164-159-11	CERAMIC	0.1uF		50V
			(E, EA, MX, MY, SP, CH, HK, AUS)		
		< CONNECTOR >			
CN501	1-568-860-11	SOCKET, CONNECTOR 17P			
* CN503	1-568-945-11	PIN, CONNECTOR 7P			
CN1501	1-564-517-11	PLUG, CONNECTOR 2P			
		< DIODE >			
D504	8-719-052-43	LED SML59420C-TP4 (▶❚❚)			
D505	8-719-300-71	LED SEL2210R (REC ●)			
D507	8-719-301-59	LED SEL2910A (POPS)			
D508	8-719-301-59	LED SEL2910A (CLASSIC)			
D509	8-719-300-71	LED SEL2210R (DBFB)			
D510	8-719-301-59	LED SEL2910A (CD)			
D511	8-719-812-44	LED TL0124 (ENTER/NEXT)			
D519	8-719-329-10	LED SEL2910D-TP3 (PAUSE ❚❚)			
D520	8-719-301-59	LED SEL2910A (ROCK)			
D521	8-719-301-59	LED SEL2910A (JAZZ)			
D522	8-719-301-59	LED SEL2910A (DANCE:EXCEPT E2, MX) (SALSA:E2, MX)			
D523	8-719-301-59	LED SEL2910A (TUNER)			
D524	8-719-301-59	LED SEL2910A (TIMER)			
D525	8-719-301-43	LED SEL2410E-C-TP6 (TUNER/BAND)			
D529	8-719-014-73	DIODE UZP-5.6BC-TP			
D530	8-719-987-63	DIODE 1N4148M			
D531	8-719-987-63	DIODE 1N4148M			
D532	8-719-987-63	DIODE 1N4148M			
D533	8-719-987-63	DIODE 1N4148M			
D541	8-719-301-59	LED SEL2910A (ROCK)			
D542	8-719-301-59	LED SEL2910A (JAZZ)			
D543	8-719-301-59	LED SEL2910A (DANCE:EXCEPT E2, MX) (SALSA:E2, MX)			
D544	8-719-301-59	LED SEL2910A (POPS)			
D545	8-719-301-59	LED SEL2910A (CLASSIC)			
		< FILTER >			
FL501	1-517-341-21	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC501	8-752-866-01	IC CXP82612-009Q			
IC502	8-749-923-43	IC GP1U57XB			
IC503	8-759-634-51	IC M5218AP			
IC504	8-759-634-51	IC M5218AP			
		< COIL >			
L501	1-410-509-11	INDUCTOR 10uH			
L502	1-410-509-11	INDUCTOR 10uH			
		< TRANSISTOR >			
Q501	8-729-900-80	TRANSISTOR DTC114ES			
Q502	8-729-118-01	TRANSISTOR 2SB1116 (AEP, UK, G, IT)			
Q502	8-729-140-04	TRANSISTOR 2SB1116A-L (E, EA, MX, MY, SP, CH, HK, AUS)			

Ref. No.	Part No.	Description	Remark
Q503	8-729-118-01	TRANSISTOR	2SB1116 (AEP, UK, G, IT)
Q503	8-729-140-04	TRANSISTOR	2SB1116A-L (E, EA, MX, MY, SP, CH, HK, AUS)
Q507	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q507	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q511	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q511	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q512	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q512	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q513	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q513	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q514	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q514	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q515	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q515	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q516	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q516	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q517	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q517	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q518	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q518	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q519	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q519	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)
Q520	8-729-117-59	TRANSISTOR	2SA1175 (AEP, UK, G, IT)
Q520	8-729-119-76	TRANSISTOR	2SA1175-HFE (E, EA, MX, MY, SP, CH, HK, AUS)

< RESISTOR >

R501	1-249-429-11	CARBON	10K 5%	1/4W
R502	1-249-429-11	CARBON	10K 5%	1/4W
R503	1-249-429-11	CARBON	10K 5%	1/4W
R504	1-249-429-11	CARBON	10K 5%	1/4W
R505	1-249-429-11	CARBON	10K 5%	1/4W
R506	1-249-429-11	CARBON	10K 5%	1/4W
R507	1-249-429-11	CARBON	10K 5%	1/4W
R508	1-249-429-11	CARBON	10K 5%	1/4W
R509	1-249-429-11	CARBON	10K 5%	1/4W
R510	1-249-429-11	CARBON	10K 5%	1/4W
R511	1-249-419-11	CARBON	1.5K 5%	1/4W
R512	1-249-407-11	CARBON	150 5%	1/4W
R513	1-249-410-11	CARBON	270 5%	1/4W

Ref. No.	Part No.	Description			Remark
R514	1-249-408-11	CARBON	180	5%	1/4W
R515	1-249-409-11	CARBON	220	5%	1/4W
R516	1-249-411-11	CARBON	330	5%	1/4W
R517	1-249-413-11	CARBON	470	5%	1/4W
R518	1-247-807-31	CARBON	100	5%	1/4W
R519	1-249-409-11	CARBON	220	5%	1/4W
R520	1-249-407-11	CARBON	150	5%	1/4W
R521	1-247-807-31	CARBON	100	5%	1/4W
R522	1-249-409-11	CARBON	220	5%	1/4W
R524	1-249-419-11	CARBON	1.5K	5%	1/4W
R525	1-249-407-11	CARBON	150	5%	1/4W
R526	1-249-410-11	CARBON	270	5%	1/4W
R527	1-249-408-11	CARBON	180	5%	1/4W
R537	1-249-419-11	CARBON	1.5K	5%	1/4W
R538	1-249-407-11	CARBON	150	5%	1/4W
R539	1-249-410-11	CARBON	270	5%	1/4W
R540	1-249-408-11	CARBON	180	5%	1/4W
R541	1-249-409-11	CARBON	220	5%	1/4W
R542	1-249-411-11	CARBON	330	5%	1/4W
R543	1-249-413-11	CARBON	470	5%	1/4W
R544	1-249-414-11	CARBON	560	5%	1/4W
R545	1-249-416-11	CARBON	820	5%	1/4W
R546	1-249-418-11	CARBON	1.2K	5%	1/4W
R547	1-249-420-11	CARBON	1.8K	5%	1/4W
R548	1-249-423-11	CARBON	3.3K	5%	1/4W
R549	1-249-427-11	CARBON	6.8K	5%	1/4W
R550	1-249-419-11	CARBON	1.5K	5%	1/4W
R551	1-249-419-11	CARBON	1.5K	5%	1/4W
R552	1-247-807-31	CARBON	100	5%	1/4W
R557	1-249-414-11	CARBON	560	5%	1/4W
R558	1-249-416-11	CARBON	820	5%	1/4W
R559	1-249-418-11	CARBON	1.2K	5%	1/4W
R560	1-249-420-11	CARBON	1.8K	5%	1/4W
R561	1-249-423-11	CARBON	3.3K	5%	1/4W
R563	1-247-903-00	CARBON	1M	5%	1/4W
R564	1-247-807-31	CARBON	100	5%	1/4W
R565	1-247-807-31	CARBON	100	5%	1/4W
R566	1-247-807-31	CARBON	100	5%	1/4W
R567	1-247-807-31	CARBON	100	5%	1/4W
R568	1-247-807-31	CARBON	100	5%	1/4W
R569	1-249-429-11	CARBON	10K	5%	1/4W
R570	1-249-421-11	CARBON	2.2K	5%	1/4W
R571	1-249-429-11	CARBON	10K	5%	1/4W
R572	1-249-421-11	CARBON	2.2K	5%	1/4W
R576	1-249-404-00	CARBON	82	5%	1/4W
R577	1-247-807-31	CARBON	100	5%	1/4W
R578	1-249-407-11	CARBON	150	5%	1/4W
R579	1-249-407-11	CARBON	150	5%	1/4W

PANEL AMS ENCODER SURROUND

Ref. No.	Part No.	Description			Remark
R581	1-247-807-31	CARBON	100	5%	1/4W
R582	1-247-807-31	CARBON	100	5%	1/4W
R583	1-247-807-31	CARBON	100	5%	1/4W
R584	1-249-404-00	CARBON	82	5%	1/4W
R585	1-249-409-11	CARBON	220	5%	1/4W
R586	1-249-409-11	CARBON	220	5%	1/4W
R587	1-249-409-11	CARBON	220	5%	1/4W
R588	1-249-409-11	CARBON	220	5%	1/4W
R589	1-249-421-11	CARBON	2.2K	5%	1/4W
R590	1-247-807-31	CARBON	100	5%	1/4W
R591	1-247-807-31	CARBON	100	5%	1/4W
R592	1-247-807-31	CARBON	100	5%	1/4W
R593	1-249-429-11	CARBON	10K	5%	1/4W
R596	1-249-429-11	CARBON	10K	5%	1/4W
R600	1-249-435-11	CARBON	33K	5%	1/4W
R601	1-249-441-11	CARBON	100K	5%	1/4W
R602	1-247-895-00	CARBON	470K	5%	1/4W
R604	1-249-435-11	CARBON	33K	5%	1/4W
R605	1-249-441-11	CARBON	100K	5%	1/4W
R606	1-247-895-00	CARBON	470K	5%	1/4W
R608	1-249-435-11	CARBON	33K	5%	1/4W
R609	1-249-441-11	CARBON	100K	5%	1/4W
R610	1-247-895-00	CARBON	470K	5%	1/4W
R612	1-249-435-11	CARBON	33K	5%	1/4W
R613	1-249-441-11	CARBON	100K	5%	1/4W
R614	1-247-895-00	CARBON	470K	5%	1/4W
R616	1-249-437-11	CARBON	47K	5%	1/4W
R617	1-249-437-11	CARBON	47K	5%	1/4W
R618	1-249-437-11	CARBON	47K	5%	1/4W
R619	1-249-437-11	CARBON	47K	5%	1/4W
R622	1-249-401-11	CARBON	47	5%	1/4W
R654	1-249-407-11	CARBON	150	5%	1/4W
R655	1-249-407-11	CARBON	150	5%	1/4W
R656	1-249-407-11	CARBON	150	5%	1/4W
R657	1-249-407-11	CARBON	150	5%	1/4W
R1501	1-247-807-31	CARBON	100	5%	1/4W

< SWITCH >

S501	1-467-869-11	ENCODER, ROTARY (VOLUME)
S502	1-467-968-11	ENCODER, ROTARY (- ⏮ ◀——▶ ⏭ +)
S504	1-572-184-11	SWITCH, KEYBOARD (CLOCK SET)
S505	1-572-184-11	SWITCH, KEYBOARD (DISPLAY)
S506	1-572-184-11	SWITCH, KEYBOARD (FUNCTION)
S507	1-572-184-11	SWITCH, KEYBOARD (▶II)
S508	1-572-184-11	SWITCH, KEYBOARD (■)
S509	1-572-184-11	SWITCH, KEYBOARD (⏏ OPEN CLOSE)
S516	1-572-184-11	SWITCH, KEYBOARD (DBFB)
S517	1-572-184-11	SWITCH, KEYBOARD (TUNER MEMORY)
S518	1-572-184-11	SWITCH, KEYBOARD (ENTER/NEXT)
S519	1-572-184-11	SWITCH, KEYBOARD (TUNER/BAND)
S529	1-572-184-11	SWITCH, KEYBOARD (ROCK)
S530	1-572-184-11	SWITCH, KEYBOARD (POPS)
S531	1-572-184-11	SWITCH, KEYBOARD (JAZZ)
S532	1-572-184-11	SWITCH, KEYBOARD (CLASSIC)
S533	1-572-184-11	SWITCH, KEYBOARD (DANCE:EXCEPT E2, MX) (SALSA:E2, MX)
S534	1-572-184-11	SWITCH, KEYBOARD (TIMER SET)
S535	1-572-184-11	SWITCH, KEYBOARD (DAILY)
S536	1-572-184-11	SWITCH, KEYBOARD (TIMER REC)
S537	1-572-184-11	SWITCH, KEYBOARD (PROGRAM)
S538	1-572-184-11	SWITCH, KEYBOARD (SHUFFLE)
S539	1-572-184-11	SWITCH, KEYBOARD (CONTINUE)
S540	1-572-184-11	SWITCH, KEYBOARD (TUNING MODE)
S541	1-572-184-11	SWITCH, KEYBOARD (MONO)
S548	1-572-184-11	SWITCH, KEYBOARD (DOLBY NR)
S549	1-572-184-11	SWITCH, KEYBOARD (DIRECTION MODE)
S550	1-572-184-11	SWITCH, KEYBOARD (CD SYNCHRO)
S551	1-572-184-11	SWITCH, KEYBOARD (HIGH SPEED DUBBING)
S552	1-572-184-11	SWITCH, KEYBOARD (REC ●)
S553	1-572-184-11	SWITCH, KEYBOARD (PAUSE II)
S557	1-572-184-11	SWITCH, KEYBOARD (SYSTEM POWER)

< VIBRATOR >

X501	1-567-819-11	VIBRATOR, CERAMIC (4MHz)

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*	A-4378-074-A	SURROUND BOARD, COMPLETE (AE1)
*	A-4378-081-A	SURROUND BOARD, COMPLETE (AE2, UK, G, IT)
*	A-4378-061-A	SURROUND BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)

****

*	4-942-204-01	PLATE, GROUND
	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S

< CAPACITOR >

C1101	1-136-167-00	FILM	0.15uF	5% 50V
C1102	1-136-167-00	FILM	0.15uF	5% 50V
C1103	1-126-111-11	ELECT	3.3uF	20% 50V
C1104	1-126-111-11	ELECT	3.3uF	20% 50V
C1105	1-136-167-00	FILM	0.15uF	5% 50V
C1106	1-136-167-00	FILM	0.15uF	5% 50V
C1107	1-124-927-11	ELECT	4.7uF	20% 100V
C1108	1-124-927-11	ELECT	4.7uF	20% 100V
C1109	1-124-902-00	ELECT	0.47uF	20% 50V
C1110	1-124-902-00	ELECT	0.47uF	20% 50V
C1111	1-124-927-11	ELECT	4.7uF	20% 100V
C1112	1-124-927-11	ELECT	4.7uF	20% 100V

Ref. No.	Part No.	Description			Remark
C1113	1-124-902-00	ELECT	0.47uF	20%	50V
C1114	1-124-902-00	ELECT	0.47uF	20%	50V
C1115	1-136-165-00	FILM	0.1uF	5%	50V
C1116	1-136-165-00	FILM	0.1uF	5%	50V
C1117	1-136-165-00	FILM	0.1uF	5%	50V
C1118	1-136-165-00	FILM	0.1uF	5%	50V
C1119	1-126-964-11	ELECT	10uF	20%	50V
C1120	1-126-964-11	ELECT	10uF	20%	50V
C1121	1-126-923-11	ELECT	220uF	20%	10V
C1122	1-126-964-11	ELECT	10uF	20%	50V
C1123	1-126-964-11	ELECT	10uF	20%	50V
C1124	1-126-964-11	ELECT	10uF	20%	50V
C1125	1-126-964-11	ELECT	10uF	20%	50V
C1126	1-126-923-11	ELECT	220uF	20%	10V
C1127	1-136-161-00	FILM	0.047uF	5%	50V
C1128	1-136-157-00	FILM	0.022uF	5%	50V
C1129	1-162-292-31	CERAMIC	680PF	10%	50V
C1130	1-126-933-11	ELECT	100uF	20%	10V
C1131	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1132	1-126-964-11	ELECT	10uF	20%	50V
C1133	1-136-173-00	FILM	0.47uF	5%	50V
C1134	1-104-664-11	ELECT	47uF	20%	25V
C1141	1-126-964-11	ELECT	10uF	20%	50V
C1142	1-136-159-00	FILM	0.033uF	5%	50V
C1143	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1144	1-126-933-11	ELECT	100uF	20%	10V
C1145	1-124-925-11	ELECT	2.2uF	20%	100V
C1146	1-162-286-31	CERAMIC	220PF	10%	50V
C1147	1-164-159-11	CERAMIC	0.1uF		50V
C1148	1-126-923-11	ELECT	220uF	20%	10V
C1149	1-136-159-00	FILM	0.033uF	5%	50V
C1150	1-130-473-00	MYLAR	0.0015uF	5%	50V
C1151	1-136-159-00	FILM	0.033uF	5%	50V
C1152	1-124-903-11	ELECT	1uF	20%	50V
C1153	1-126-923-11	ELECT	220uF	20%	10V
C1154	1-126-964-11	ELECT	10uF	20%	50V
C1155	1-126-964-11	ELECT	10uF	20%	50V
C1156	1-126-964-11	ELECT	10uF	20%	50V
C1157	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1159	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1161	1-130-467-00	MYLAR	470PF	5%	50V
C1162	1-130-467-00	MYLAR	470PF	5%	50V
C1163	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1171	1-126-964-11	ELECT	10uF	20%	50V
C1172	1-126-964-11	ELECT	10uF	20%	50V
C1173	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1174	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1175	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C1176	1-126-964-11	ELECT	10uF	20%	50V
C1177	1-162-286-31	CERAMIC	220PF	10%	50V
C1178	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1179	1-126-964-11	ELECT	10uF	20%	50V
C1180	1-126-964-11	ELECT	10uF	20%	50V
C1181	1-126-933-11	ELECT	100uF	20%	10V
C1182	1-164-159-11	CERAMIC	0.1uF		50V
C1183	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1184	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1185	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1186	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1187	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1188	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1189	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1191	1-126-964-11	ELECT	10uF	20%	50V
C1192	1-126-923-11	ELECT	220uF	20%	10V
C1195	1-109-889-11	ELECT	1uF	20%	50V
C1196	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1197	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1198	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1199	1-162-306-11	CERAMIC	0.01uF	30%	16V
C2510	1-162-282-31	CERAMIC	100PF	10%	50V
C2511	1-162-282-31	CERAMIC	100PF	10%	50V
C4001	1-126-923-11	ELECT	220uF	20%	10V
C4002	1-126-964-11	ELECT	10uF	20%	50V
C4003	1-162-294-31	CERAMIC	0.001uF	10%	50V

< CONNECTOR >

	CN1101	1-691-765-21	PLUG (MICRO CONNECTOR) 3P
	CN1102	1-691-771-31	PLUG (MICRO CONNECTOR) 9P
	CN1103	1-691-766-11	PLUG (MICRO CONNECTOR) 4P
*	CN1104	1-568-934-11	PIN, CONNECTOR 7P
*	CN1105	1-568-935-11	PIN, CONNECTOR 8P
*	CN1106	1-569-502-11	PIN, CONNECTOR 7P
	CN1107	1-564-505-11	PLUG, CONNECTOR 2P
*	CN1108	1-691-767-11	PLUG (MICRO CONNECTOR) 5P

< DIODE >

	D1101	8-719-987-63	DIODE 1N4148M
	D4002	8-719-987-63	DIODE 1N4148M
	D4003	8-719-987-63	DIODE 1N4148M
	D4004	8-719-987-63	DIODE 1N4148M
	D4005	8-719-987-63	DIODE 1N4148M
	D4006	8-719-987-63	DIODE 1N4148M
	D4007	8-719-987-63	DIODE 1N4148M

< IC >

	IC1101	8-759-248-74	IC LA2785

SURROUND SURROUND AMP

Ref.No.	Part No.	Description				Remark
IC1102	8-759-341-23	IC LV1011				
IC1103	8-759-634-51	IC M5218AP				
IC1104	8-759-281-42	IC TC9210P				
IC1105	8-759-701-59	IC NJM78M09FA				
IC1106	8-759-358-08	IC TMP87C846N-4296				
		< COIL >				
L1101	1-410-509-11	INDUCTOR	10uH			
L1102	1-410-509-11	INDUCTOR	10uH			
L1104	1-410-509-11	INDUCTOR	10uH			
L1105	1-410-509-11	INDUCTOR	10uH			
L1106	1-410-509-11	INDUCTOR	10uH			
L1187	1-410-509-11	INDUCTOR	10uH			
L1188	1-410-397-21	FERRITE BEAD INDUCTOR				
		< TRANSISTOR >				
Q1101	8-729-141-26	TRANSISTOR	2SC3622A-LK			
Q1102	8-729-141-26	TRANSISTOR	2SC3622A-LK			
Q1103	8-729-422-57	TRANSISTOR	UN4111			
Q4001	8-729-119-76	TRANSISTOR	2SA1175-HFE			
Q4002	8-729-422-57	TRANSISTOR	UN4111			
Q4003	8-729-119-76	TRANSISTOR	2SA1175-HFE			
Q4004	8-729-900-80	TRANSISTOR	DTC114ES			
		< RESISTOR >				
R1101	1-249-441-11	CARBON	100K	5%	1/4W	
R1102	1-249-441-11	CARBON	100K	5%	1/4W	
R1103	1-249-417-11	CARBON	1K	5%	1/4W	
R1104	1-249-432-11	CARBON	18K	5%	1/4W	
R1121	1-249-436-11	CARBON	39K	5%	1/4W	
R1122	1-249-436-11	CARBON	39K	5%	1/4W	
R1123	1-249-417-11	CARBON	1K	5%	1/4W	
R1124	1-247-903-00	CARBON	1M	5%	1/4W	
R1125	1-249-411-11	CARBON	330	5%	1/4W	
R1126	1-249-417-11	CARBON	1K	5%	1/4W	
R1127	1-249-417-11	CARBON	1K	5%	1/4W	
R1128	1-249-417-11	CARBON	1K	5%	1/4W	
R1131	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1132	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1133	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1134	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1135	1-249-441-11	CARBON	100K	5%	1/4W	
R1136	1-249-441-11	CARBON	100K	5%	1/4W	
R1137	1-249-441-11	CARBON	100K	5%	1/4W	
R1138	1-249-441-11	CARBON	100K	5%	1/4W	
R1139	1-249-417-11	CARBON	1K	5%	1/4W	
R1140	1-249-417-11	CARBON	1K	5%	1/4W	
R1141	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1142	1-249-421-11	CARBON	2.2K	5%	1/4W	
R1143	1-249-429-11	CARBON	10K	5%	1/4W	
R1144	1-247-887-00	CARBON	220K	5%	1/4W	
R1145	1-249-441-11	CARBON	100K	5%	1/4W	
R1147	1-249-417-11	CARBON	1K	5%	1/4W	
R1148	1-249-417-11	CARBON	1K	5%	1/4W	
R1150	1-249-409-11	CARBON	220	5%	1/4W	
R1151	1-249-409-11	CARBON	220	5%	1/4W	
R1152	1-249-409-11	CARBON	220	5%	1/4W	
R1153	1-249-409-11	CARBON	220	5%	1/4W	
R1154	1-249-437-11	CARBON	47K	5%	1/4W	
R1155	1-249-437-11	CARBON	47K	5%	1/4W	
R1156	1-249-413-11	CARBON	470	5%	1/4W	
R1157	1-249-413-11	CARBON	470	5%	1/4W	
R1158	1-249-413-11	CARBON	470	5%	1/4W	
R1159	1-249-433-11	CARBON	22K	5%	1/4W	
R1161	1-249-417-11	CARBON	1K	5%	1/4W	
R1162	1-249-417-11	CARBON	1K	5%	1/4W	
R1163	1-249-417-11	CARBON	1K	5%	1/4W	
R1164	1-249-409-11	CARBON	220	5%	1/4W	
R1165	1-249-409-11	CARBON	220	5%	1/4W	
R1166	1-249-409-11	CARBON	220	5%	1/4W	
R1167	1-249-433-11	CARBON	22K	5%	1/4W	
R1171	1-247-895-00	CARBON	470K	5%	1/4W	
R1172	1-247-895-00	CARBON	470K	5%	1/4W	
R4002	1-249-429-11	CARBON	10K	5%	1/4W	
R4003	1-249-433-11	CARBON	22K	5%	1/4W	
R4004	1-249-429-11	CARBON	10K	5%	1/4W	
R4005	1-249-401-11	CARBON	47	5%	1/4W	
R4006	1-249-441-11	CARBON	100k	5%	1/4W	
R4008	1-249-429-11	CARBON	10K	5%	1/4W	
		< VIBRATOR >				
X1101	1-579-125-11	VIBRATOR, CERAMIC (8MHz)				
X1102	1-579-125-11	VIBRATOR, CERAMIC (8MHz)				
**********						
*	A-4378-076-A	SURROUND AMP BOARD, COMPLETE (AE1)				
*	A-4378-083-A	SURROUND AMP BOARD, COMPLETE (AE2, UK, G, IT)				
*	A-4378-063-A	SURROUND AMP BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)				
		**********				
*	4-925-530-01	PLATE, GROUND				
		< CAPACITOR >				
C1301	1-124-927-11	ELECT	4.7uF	20%	100V	
C1302	1-162-290-31	CERAMIC	470PF	10%	50V	
C1303	1-162-290-31	CERAMIC	470PF	10%	50V	

Ref. No.	Part No.	Description			Remark
C1304	1-126-967-11	ELECT	47uF	20%	50V
C1305	1-126-967-11	ELECT	47uF	20%	50V
C1306	1-124-122-11	ELECT	100uF	20%	50V
C1308	1-128-551-11	ELECT	22uF	20%	50V
C1310	1-136-495-11	FILM	0.068uF	5%	50V
C1311	1-136-495-11	FILM	0.068uF	5%	50V
C1320	1-126-923-11	ELECT	220uF	20%	10V
C1325	1-162-284-31	CERAMIC	150PF	10%	50V
C1326	1-162-284-31	CERAMIC	150PF	10%	50V (AE2, UK, G, IT)
C1351	1-124-927-11	ELECT	4.7uF	20%	100V
C1352	1-162-290-31	CERAMIC	470PF	10%	50V
C1353	1-162-290-31	CERAMIC	470PF	10%	50V
C1354	1-126-967-11	ELECT	47uF	20%	50V
C1355	1-126-967-11	ELECT	47uF	20%	50V
C1356	1-124-122-11	ELECT	100uF	20%	50V
C1360	1-136-495-11	FILM	0.068uF	5%	50V
C1361	1-136-495-11	FILM	0.068uF	5%	50V
		< CONNECTOR >			
CN1301	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
CN1302	1-691-765-21	PLUG (MICRO CONNECTOR) 3P			
CN1303	1-691-766-21	PLUG (MICRO CONNECTOR) 4P			
		< DIODE >			
D1301	8-719-987-63	DIODE 1N4148M			
D1302	8-719-987-63	DIODE 1N4148M			
D1303	8-719-987-63	DIODE 1N4148M			
D1351	8-719-987-63	DIODE 1N4148M			
		< IC >			
IC1301	8-749-900-96	IC STK-4142MK2 (AEP, UK, G, IT)			
IC1301	8-749-920-10	IC STK4172MK2 (E, EA, MX, MY, SP, CH, HK, AUS)			
		< TRANSISTOR >			
Q1301	8-729-116-81	TRANSISTOR NYD3T-TP (AEP, UK, G, IT)			
Q1301	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA (E, EA, MX, MY, SP, CH, HK, AUS)			
Q1351	8-729-116-81	TRANSISTOR NYD3T-TP (AEP, UK, G, IT)			
Q1351	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA (E, EA, MX, MY, SP, CH, HK, AUS)			
		< RESISTOR >			
R1301	1-249-417-11	CARBON	1K	5%	1/4W
R1302	1-249-437-11	CARBON	47K	5%	1/4W
R1303	1-249-414-11	CARBON	560	5%	1/4W
R1304	1-249-437-11	CARBON	47K	5%	1/4W
R1305	1-249-425-11	CARBON	4.7K	5%	1/4W
R1306	1-249-425-11	CARBON	4.7K	5%	1/4W
R1307	1-249-425-11	CARBON	4.7K	5%	1/4W
R1308	1-249-425-11	CARBON	4.7K	5%	1/4W
⚠R1309	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R1310	1-208-602-11	WIREWOUND	0.22	10%	2W F
R1311	1-249-417-11	CARBON	1K	5%	1/4W
R1312	1-249-431-11	CARBON	15K	5%	1/4W
R1313	1-249-441-11	CARBON	100K	5%	1/4W
R1314	1-249-421-11	CARBON	2.2K	5%	1/4W
R1315	1-249-421-11	CARBON	2.2K	5%	1/4W
R1316	1-249-421-11	CARBON	2.2K	5%	1/4W
R1317	1-249-421-11	CARBON	2.2K	5%	1/4W
R1318	1-249-397-11	CARBON	22	5%	1/4W
R1319	1-249-397-11	CARBON	22	5%	1/4W
R1327	1-249-429-11	CARBON	10K	5%	1/4W
R1328	1-249-441-11	CARBON	100K	5%	1/4W
R1330	1-249-429-11	CARBON	10K	5%	1/4W
R1342	1-249-429-11	CARBON	10K	5%	1/4W
⚠R1344	1-217-637-00	FUSIBLE	1	5%	1/4W F
R1351	1-249-417-11	CARBON	1K	5%	1/4W
R1352	1-249-437-11	CARBON	47K	5%	1/4W
R1353	1-249-414-11	CARBON	560	5%	1/4W
R1354	1-249-437-11	CARBON	47K	5%	1/4W
R1355	1-249-425-11	CARBON	4.7K	5%	1/4W
R1356	1-249-425-11	CARBON	4.7K	5%	1/4W
R1357	1-249-425-11	CARBON	4.7K	5%	1/4W
R1358	1-249-425-11	CARBON	4.7K	5%	1/4W
⚠R1359	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R1360	1-208-602-11	WIREWOUND	0.22	10%	2W F
R1361	1-249-417-11	CARBON	1K	5%	1/4W
R1362	1-249-431-11	CARBON	15K	5%	1/4W
R1363	1-249-441-11	CARBON	100K	5%	1/4W
R1368	1-249-397-11	CARBON	22	5%	1/4W
R1369	1-249-397-11	CARBON	22	5%	1/4W
**********					
*	1-656-851-11	TC SW BOARD			
		**********			
		< CONNECTOR >			
CN505	1-568-954-11	PIN, CONNECTOR (STRAIGHT) 5P			
		< DIODE >			
D512	8-719-033-06	LED SEL5920A (A)			
D513	8-719-046-42	LED SEL5421E-TH8F (▷)			
D526	8-719-033-06	LED SEL5920A (B)			
D527	8-719-046-42	LED SEL5421E-TH8F (◁)			
		< RESISTOR >			
R528	1-249-409-11	CARBON	220	5%	1/4W

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

TC SW TERMINAL

Ref. No.	Part No.	Description			Remark
R529	1-249-411-11	CARBON	330	5%	1/4W
R530	1-249-413-11	CARBON	470	5%	1/4W
R531	1-249-414-11	CARBON	560	5%	1/4W
R532	1-249-416-11	CARBON	820	5%	1/4W
R533	1-249-418-11	CARBON	1.2K	5%	1/4W
R534	1-249-420-11	CARBON	1.8K	5%	1/4W
		< SWITCH >			
S520	1-572-184-11	SWITCH, KEYBOARD (DECK A/DECK B)			
S521	1-572-184-11	SWITCH, KEYBOARD (▷)			
S522	1-572-184-11	SWITCH, KEYBOARD (◁)			
S523	1-572-184-11	SWITCH, KEYBOARD (■)			
S524	1-572-184-11	SWITCH, KEYBOARD (▶▶)			
S525	1-572-184-11	SWITCH, KEYBOARD (◀◀)			
**********					
*	A-4378-077-A	TERMINAL BOARD, COMPLETE (AE1)			
*	A-4378-084-A	TERMINAL BOARD, COMPLETE (AE2, UK, G, IT)			
*	A-4378-064-A	TERMINAL BOARD, COMPLETE (E, EA, MX, MY, SP, CH, HK, AUS)			
		**********			
		< CAPACITOR >			
C1401	1-164-159-11	CERAMIC	0.1uF		50V
C1402	1-164-159-11	CERAMIC	0.1uF		50V
C1403	1-164-159-11	CERAMIC	0.1uF		50V
C1404	1-164-159-11	CERAMIC	0.1uF		50V
C1405	1-164-159-11	CERAMIC	0.1uF		50V
C1406	1-164-159-11	CERAMIC	0.1uF		50V
C1407	1-164-159-11	CERAMIC	0.1uF		50V
C1408	1-164-159-11	CERAMIC	0.1uF		50V
C1409	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1411	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1412	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1413	1-161-494-00	CERAMIC	0.022uF		25V
C1414	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
* CN1401	1-564-520-11	PLUG, CONNECTOR 5P			
* CN1402	1-564-520-11	PLUG, CONNECTOR 5P			
* CN1403	1-564-521-11	PLUG, CONNECTOR 6P			
* CN1405	1-569-493-11	SOCKET, CONNECTOR 7P			
		< DIODE >			
D1401	8-719-987-63	DIODE 1N4148M			
D1402	8-719-987-63	DIODE 1N4148M			
D1403	8-719-987-63	DIODE 1N4148M			

Ref. No.	Part No.	Description			Remark
		< COIL >			
L1401	1-420-872-00	COIL, AIR-CORE (AE2, UK, G, IT)			
L1402	1-420-872-00	COIL, AIR-CORE (AE2, UK, G, IT)			
L1403	1-420-872-00	COIL, AIR-CORE (AE2, UK, G, IT)			
L1404	1-420-872-00	COIL, AIR-CORE (AE2, UK, G, IT)			
		< TRANSISTOR >			
Q1401	8-729-118-01	TRANSISTOR 2SB1116 (AEP, UK, G, IT)			
Q1401	8-729-140-04	TRANSISTOR 2SB1116A-L (E, EA, MX, MY, SP, CH, HK, AUS)			
Q1402	8-729-900-80	TRANSISTOR DTC114ES			
		< RESISTOR >			
R1401	1-249-393-11	CARBON	10	5%	1/4W
R1402	1-249-393-11	CARBON	10	5%	1/4W
R1403	1-249-393-11	CARBON	10	5%	1/4W
R1404	1-249-393-11	CARBON	10	5%	1/4W
R1405	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1406	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1407	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1408	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1409	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1410	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1411	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1412	1-249-389-11	CARBON	4.7	5%	1/4W (AE2, UK, G, IT)
R1413	1-249-417-11	CARBON	1K	5%	1/4W
R1414	1-249-417-11	CARBON	1K	5%	1/4W
R1415	1-249-417-11	CARBON	1K	5%	1/4W
R1416	1-249-417-11	CARBON	1K	5%	1/4W
R1417	1-249-413-11	CARBON	470	5%	1/4W
R1418	1-249-425-11	CARBON	4.7K	5%	1/4W
R1419	1-249-437-11	CARBON	47K	5%	1/4W
R1420	1-249-439-11	CARBON	68K	5%	1/4W
R1421	1-249-437-11	CARBON	47K	5%	1/4W
R1422	1-249-439-11	CARBON	68K	5%	1/4W
R1423	1-249-429-11	CARBON	10K	5%	1/4W
R1424	1-249-429-11	CARBON	10K	5%	1/4W
R1425	1-249-429-11	CARBON	10K	5%	1/4W
R1426	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description	Remark
		< RELAY >	
RY1401	1-515-921-11	RELAY (12V)	
RY1402	1-515-921-11	RELAY (12V)	
		< TERMINAL >	
TM1401	1-537-906-11	TERMINAL BOARD (FRONT SPEAKER)	
TM1402	1-537-906-11	TERMINAL BOARD (CENTER SPEAKER)	
TM1403	1-537-906-11	TERMINAL BOARD (REAR SPEAKER)	
**********			
*	1-656-849-11	TRANSFORMER BOARD	
		**********	
	1-533-293-11	FUSE HOLDER	
		< CONNECTOR >	
* CN801	1-564-526-11	PLUG, CONNECTOR 11P	
CN851	1-564-321-00	PIN, CONNECTOR 2P	
		< FUSE >	
⚠F801	1-532-286-00	FUSE, TIME LAG (2.5A 250V)	(E, EA, MX, SP, CH, HK)
⚠F802	1-532-285-00	FUSE, TIME LAG (1.25A 250V) (EXCEPT MX)	
		< SWITCH >	
⚠S801	1-572-675-11	SWITCH, POWER VOLTAGE CHANGE (VOLTAGE SELECTOR) (E, EA, SP, CH, HK)	
**********			
		MISCELLANEOUS	
		**********	
10	1-654-751-11	FLEXIBLE BOARD	
⚠14	1-569-007-11	ADAPTER, CONVERSION 2P (E3)	
⚠14	1-569-008-11	ADAPTER, CONVERSION 2P (EA, SP, CH)	
⚠14	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
61	1-769-689-31	WIRE (FLAT TYPE) (21 CORE)	
62	1-769-688-31	WIRE (FLAT TYPE) (11 CORE)	
116	1-769-690-31	WIRE (FLAT TYPE) (17 CORE)	
252	1-452-719-11	MAGNET ASSY	
262	1-751-806-11	WIRE (FLAT TYPE) (5 CORE)	
⚠304	8-848-387-01	DEVICE, OPTICAL KSS-213BA/S-N	
305	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
⚠CNP801	1-575-651-11	CORD, POWER (AEP, G, IT, EA, MY, SP, CH, HK)	
⚠CNP801	1-575-653-11	CORD, POWER (E, MX)	
⚠CNP801	1-696-847-11	CORD, POWER (AUS)	
⚠CNP801	1-751-520-21	CORD, POWER (UK)	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK) (DECK-A)	
HRPE1011	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE) (DECK-B)	
M1	X-3369-110-1	MOTOR ASSY (CAPSTAN)	
M2	X-3369-111-1	MOTOR ASSY (TRIGGER)	
M101	X-4917-523-3	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	
M102	X-4917-504-1	MOTOR ASSY (SLED MOTOR)	
M903	A-4604-363-A	MOTOR (L) ASSY (LOADING)	
⚠T801	1-427-972-11	TRANSFORMER, POWER	(E, EA, MX, MY, SP, CH, HK, AUS)
⚠T801	1-427-973-11	TRANSFORMER, POWER (AEP, UK, G, IT)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-473-207-11	REMOTE COMMANDER (RM-U33AV) (UK)	
	1-501-374-11	ANTENNA, LOOP (UK)	
	1-501-594-11	ANTENNA (FM) (UK)	
	3-707-584-21	COVER, BATTERY (for RM-U33AV) (UK)	
	3-798-868-41	MANUAL, INSTRUCTION (ENGLISH) (UK)	
*	4-972-288-01	CUSHION (FRONT)	
*	4-972-289-01	CUSHION (REAR)	
*	4-975-446-01	INDIVIDUAL CARTON (UK)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-682-548-04	SCREW +BVTT 3X8 (S)	
#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
#4	7-685-871-01	SCREW +BVTT 3X6 (S)	
#5	7-621-770-67	SCREW +BVTT 2.6X6 (S)	
#6	7-621-775-00	SCREW +B 2.6X3	
#7	7-685-131-19	SCREW +BTP 2.6X4 TYPE2 N-S	
#8	7-623-921-01	RING, RETAINING, CAPSTAN	
#9	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#10	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#11	7-621-255-15	SCREW +P 2X3	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

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